

**2007** IEDC

# **Life Sciences** *Report*



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# Indiana's Life Sciences

Intellectual capital, public support, academic partnerships, workforce excellence, and business and industry collaborations are the driving force behind the life sciences industry in Indiana – one of the nation's leading states in the life sciences.

For more than a century, Indiana has been a center of innovations in the life sciences, pharmaceutical and medical device industries. Indiana has a long-established core of pharmaceutical companies, medical device designers and manufacturers, and major-league healthcare providers. This core group of companies interacts with the financing and investing community, biotech entrepreneurs, academic centers and service organizations to help make the state a cradle for innovation.

These partnerships – most notably BioCrossroads and the Indiana Health Industry Forum – are providing the necessary resources to make Indiana a national and international life sciences center. BioCrossroads alone represents an abundance of top research and academic programs, with affiliated incubators working in tandem to develop commercial opportunities in a variety of fields, ranging from cancer research and bioinformatics to sports medicine and biomedical engineering.

Indiana was identified as one of the nation's top four life sciences leaders as defined by number and concentration of life sciences-related jobs, according to a May 2006 report by the Battelle Memorial Institute and the Biotechnology Industry Organization. Indiana was one of only three states or regions to have specialization in three of four key biosciences subsectors – agricultural feedstock and chemicals, drugs and pharmaceuticals and medical devices and equipment. Only one state had a specialization in all four bioscience subsectors.

On a regional level, Indiana has seven metro areas that have a concentration of employment in drugs and pharmaceuticals that is 50 percent greater than the national average.

In a comparison of national Metropolitan Statistical Areas (MSAs), Indianapolis is ranked as the 9<sup>th</sup> largest in the nation in total biosciences employment – ahead of such cities as Washington D.C., Houston, St. Louis, Seattle, Pittsburgh and Atlanta. Indiana's nationally recognized biosciences clusters are found in Bloomington, Elkhart-Goshen, Evansville, Lafayette, South Bend-Mishawaka, and Terre Haute.

Indiana's entrepreneurial environment allows participants to take advantage of business expertise, cutting-edge research, venture capital funding, and government policies that nurture and support innovation to make Indiana a hotbed for the life sciences.

- *Indiana is home to pharmaceutical and medical device industry leaders like Eli Lilly and Company, Zimmer, Roche Diagnostics, Biomet and more.*
- *Indiana's pharmaceutical industry ranks fifth in the nation in terms of sales, shipments, receipts and revenues.*
- *Indiana has the second highest concentration of biopharmaceutical jobs in the nation.*
- *Warsaw, Indiana, is known as "The Orthopedics Capital of the World" and is home to the headquarters of many medical device manufacturers, including Biomet, Zimmer and DePuy.*
- *Indiana-based orthopedic companies top \$4 billion in sales annually.*
- *Indiana is also home to Roche, the top medical diagnostics company in the world, and the Regenstrief Institute, which is the world's largest database of electronic medical records.*
- *The Indiana life sciences industry accounts for more than \$21 billion in wages and \$8 billion in state and federal taxes paid annually.*
- *About 18 percent – or \$69 billion – of Indiana's annual economic output is tied to the life sciences.*
- *More than 578,000 Indiana jobs – one in nine of all jobs in the state – are directly or indirectly tied to the life sciences and health care industry.*

# *State Life Sciences Support*

Indiana business development efforts are focused on the life sciences.

Through the Indiana Economic Development Corporation – the state's lead economic development organization – the state of Indiana offers many incentive programs for companies creating jobs and raising income in Indiana.

Economic development incentives include tax credits based on job creation and capital investment, training grants, and public infrastructure assistance. Some of these programs are:

## **21<sup>st</sup> Century Research and Technology Fund**

The 21 Fund helps develop and commercialize advanced technologies in Indiana. Proposals go through a review process whereby the technology or science is reviewed by experts in the field and the commercial viability of the proposal is evaluated.

## **INBiz Initiative**

The mission of Indiana's new INBiz Initiative is to help businesses grow and create new jobs within the state. The INBiz Initiative, previously called the Small Business Development Center initiative, provides valuable resources to entrepreneurs by offering easier access to local and statewide capital and venture funding, a network of experienced entrepreneurs who volunteer to provide mentoring and business planning advice, and information regarding federal funding opportunities, as well as regional and state economic development programs. More information about the initiative is available at [www.InBizPortal.com](http://www.InBizPortal.com).

## **Shovel Ready Program**

The Shovel Ready program will improve the marketability of individual communities during the site selection process by helping companies identify sites that can be rapidly developed. To be Shovel Ready, a site has undergone an environmental screening process and qualifies for expedited permitting with state regulatory agencies to enable quick business investment and expansion. The Shovel Ready program lowers the cost of site development, improves efficiency of state permitting, and enhances the ability of Indiana communities to market specific site locations for economic development. Because site information is available before development, potential risks of investing and improving land use are reduced for business.

## **Skills Enhancement Fund**

This fund provides financial assistance to new and expanding companies committed to training their Indiana resident workforce. Eligible companies can receive reimbursement of up to 50 percent of eligible training costs. Indiana continues this commitment to training by allowing companies to re-apply for additional funds to retrain employees after a two-year period.

## **Industrial Development Grant Fund**

These grants help communities meet the public infrastructure needs of new or expanding business. Assistance is available for publicly-installed infrastructure leading up to, but not onto, the company's property, except in cases of rail spurs or fiber optic cable.

# *State Life Sciences Support*

## **Research and Development Tax Credit**

For taxable years beginning after December 31, 2007, the qualified research expense credit will be increased from 10 percent to 15 percent on the first \$1 million of investment. The research expense credit may be carried forward for 10 years.

## **Venture Capital Investment Tax Credit**

This tax credit is a non-refundable tax credit available to qualified applicants that provide investment capital to qualified Indiana businesses. The aggregate credit amount for a particular business is equal to the lesser of 20 percent of the qualified investment or \$500,000.

## **Certified Technology Parks**

The Certified Technology Park program was created as a tool to support the attraction and growth of high-technology business in Indiana. Designation as a Certified Tech Park allows for the recapture of certain state and local tax revenue, which can be invested in the development of the park.

## **Research and Development Sales Tax Exemption**

This program provides a refund of 50 percent of the sales taxes paid on transactions involving research and development equipment acquired after June 30, 2005, and before July 1, 2007. This program will then exempt a business from 100 percent of the sales tax on research and development equipment acquired after June 30, 2007.

# *Business and Industry Resources*

Indiana's life sciences industry has been embraced by powerful combinations of academic, civic and corporate leaders – which create a flourishing, vibrant environment for new start-up companies and entrepreneurs.

## **BioCrossroads**

The state of Indiana, as well as other life sciences clusters located across the state, embraces BioCrossroads. BioCrossroads is a privately funded collaboration of life sciences leaders in Indiana that launches new life sciences businesses, provides money and support to life sciences businesses, expands science education and expands collaboration activities and encourages partnerships among Indiana's life sciences institutions.

BioCrossroads' commitment to growing new life sciences businesses based on areas of research strength has resulted in the development of two venture funds: the Indiana Seed Fund and the Indiana Future Fund; three start-up companies: Indiana Centers for Applied Protein Sciences, the Indiana Health Information Exchange and Novus Sport; numerous collaborations, including the Fairbanks Institute and the Biopharmaceutical Manufacturing Initiative; a young professionals network called Indy Hub and a new statewide K-12 science, technology, engineering and math resource network. In addition, BioCrossroads developed a statewide agriculture strategy which has since been adopted by the state of Indiana.

BioCrossroads  
300 N. Meridian Street  
Suite 950  
Indianapolis, IN 46204  
Ph: (317) 238.2450  
[www.biocrossroads.com](http://www.biocrossroads.com)

## **Bloomington Life Sciences Partnership**

Bloomington Life Sciences Partnership is a public-private partnership of health industry leaders, academia and government. Coalition partners include: manufacturers and support firms, health care delivery, academia and local economic development organizations. Formed in February 2003 by Mayor John Fernandez, the Bloomington Life Sciences Partnership is designed to bring together leaders of local life science, medical and health related entities for collaboration.

Bloomington Life Sciences Partnership  
400 W. Seventh Street  
Suite 101  
Bloomington, IN 47404  
Ph: (812) 335.7346  
[www.bloomingtonlifesciences.com](http://www.bloomingtonlifesciences.com)

# *Business and Industry Resources*

## **Indiana Chamber of Commerce**

The Indiana Chamber of Commerce is the largest broad-based business advocacy organization in the state, working with more than 4,300 member companies and 26,000 individual customers each year. In addition to eight full-time lobbyists advocating at the state and federal levels, the Chamber offers employee training conferences, regulatory compliance publications, business research services, helpline assistance and more on a variety of human resources, employment law and other topics.

Indiana Chamber of Commerce  
115 W. Washington Street  
Suite 850 S.  
Indianapolis, IN 46244  
Ph: (317) 264.3110  
[www.indianachamber.com](http://www.indianachamber.com)

## **Indiana Economic Development Corporation**

The Indiana Economic Development Corporation (IEDC) is the state of Indiana's lead economic development agency. The IEDC was officially established in February 2005 to replace the former Department of Commerce. The IEDC is organized as a public private partnership, governed by a 12-member board of directors. The IEDC Board of Directors is chaired by Governor Mitch Daniels and reflects the geographic and economic diversity of Indiana. The IEDC's mission is to grow and retain businesses in Indiana and to attract new businesses to the state.

Indiana Economic Development Corporation  
One North Capitol  
Suite 700  
Indianapolis, IN 46204  
Ph: (317) 232.8800  
[www.iedc.in.gov](http://www.iedc.in.gov)

## **Indiana Hospital&Health Association**

The Indiana Hospital&Health Association (IHHA) is the professional trade association for 169 Hoosier hospitals and health systems. The IHHA provides leadership, representation, and services in the common best interests of its members as they promote the improvement of Indiana's community health status.

Indiana Hospital&Health Association  
1 American Square  
Suite 1900  
Indianapolis, IN 46282  
Ph: (317) 633.4870  
[www.inhha.org](http://www.inhha.org)

# Business and Industry Resources

## Indiana Health Industry Forum

The mission of the Indiana Health Industry Forum (IHIF) is to position Indiana as a premier state for the creation and growth of health industry enterprises.

The IHIF is a non-profit, private sector organization, and its members represent a private/ public alliance of manufacturers, suppliers, educational institutions, health care providers, service providers and government. Since its inception in December of 1994, the IHIF has worked to define the factors that lead to economic development success in Indiana's already significant health industry, and then to build programs supporting future growth for the industry in the state.

The IHIF has acted as a catalyst, convener, innovator, coordinator and supporter of initiatives that advance the state's health-related enterprises. It has brought together diverse corporate, academic and public entities, and has heightened the general public's awareness of the health industry's growth potential and economic benefits.

All of the IHIF's efforts are directed toward achieving its strategic goals:

- *Sustaining Indiana's investment in the industry's future through such programs as the 21st Century Research and Technology Fund.*
- *Shaping a vision for Indiana's economic development that focuses on the health industry.*
- *Increasing the strength of Indiana's health industry networks to build successful collaborations and to support the creation of new businesses.*
- *Supporting the industry's growth by stimulating the creation of effective workforce development programs.*

The IHIF collaborates with both public and private economic development organizations, industry advocates, universities and corporations. In this umbrella role, the organization serves as a clearinghouse and broker of resources and information, as well as a spokesperson on issues facing the industry.

Indiana Health Industry Forum  
351 W. 10th Street  
Suite 216  
Indianapolis, IN 46202  
Ph: (317) 278.9970  
[www.ihif.org](http://www.ihif.org)

## Indiana INBiz Initiative

The Indiana INBiz Initiative is a state Initiative based organization offering a wealth of free and low cost information, management counseling, and educational services designed to support Indiana small business owners and potential entrepreneurs. The Initiative's mission is to help Indiana business grow and create new jobs within the state.

Indiana INBiz Initiative  
Central Indiana INBiz  
9301 E. 59th Street  
Room 147  
Indianapolis, IN 46216  
Ph: (317) 233.7232  
[www.InBizPortal.com](http://www.InBizPortal.com)



# *Business and Industry Resources*

## **Indiana State Department of Health**

The Indiana State Department of Health serves to promote, protect and provide for the public health of the people in Indiana. To achieve a healthier Indiana, the State Department of Health actively works to promote the integration of public health and health care policy; strengthen partnerships with local health departments; collaborate with hospitals, providers, governmental agencies, businesses, insurance, industry and other health care entities; and support locally-based responsibility for the health of the community.

Indiana State Department of Health  
2 N. Meridian Street  
Indianapolis, IN 46204  
Ph: (317) 233.1325  
[www.statehealth.in.gov](http://www.statehealth.in.gov)

## **Indiana Medical Device Manufacturers Council, Inc.**

The Indiana Medical Device Manufacturers Council, Inc. (IMDMC) is an association of nearly 60 medical device manufacturers and other companies that work closely with the medical device industry in Indiana.

The IMDMC's mission includes:

- *Serving as a voice for the Indiana medical device industry before legislatures and regulatory agencies*
- *Providing education, training and information to the medical device industry*
- *Working to foster economic growth that will benefit companies and citizens in Indiana*
- *Increasing awareness of the benefits that the Indiana medical device industry provides*
- *Facilitating interaction between members of this industry*

IMDMC's web site provides notices of upcoming educational forums featuring key political, regulatory and business leaders from throughout the region and Washington, DC; a listing of members and links to their web sites; a resource library of regulations, white papers and other timely and pertinent information pieces; membership information including online application submission; an overview of IMDMC's federal advocacy efforts on behalf of the membership; and information on how to get involved with this leader-oriented council.

Indiana Medical Device Manufacturers Council, Inc.  
P.O. Box 441385  
Indianapolis, IN 46244  
Ph: (317) 951.1388  
[www.imdmc.org](http://www.imdmc.org)

## **Indiana Venture Center, Inc.**

The Indiana Venture Center, Inc., works independently, as well as in collaboration with universities and other organizations, to increase the number and the quality of successful entrepreneurial, high growth companies in Indiana. The center thereby catalyzes the establishment of a more creative, innovative and entrepreneurial educational and business climate in Indiana.

Indiana Venture Center, Inc.  
902 N. Capitol Avenue  
Suite 302  
Indianapolis, IN 46204  
Ph: (317) 684.6700  
[www.indianaventurecenter.org](http://www.indianaventurecenter.org)

# *Business and Industry Resources*

## **Small Business Innovation Research**

Indiana's Small Business Innovation Research (SBIR) program is taking the lead in helping Indiana businesses compete for and win federal funding by assisting them in the commercialization of prototype products.

The SBIR initiative has structured several significant services to assist with the expansion of high-technology SBIR developed projects in Indiana. These services include one-on-one counseling, proposal assistance, technical/proposal reviews and educational workshops for entrepreneurs.

The initiative is committed to assisting Indiana businesses in the commercialization of their prototypes and maximizing the impact Indiana entrepreneurs and their companies and ideas have on Indiana's economy.

Small Business Innovation Research  
One North Capitol  
Suite 700  
Indianapolis, IN 46204  
Ph: (317) 232.8800  
[www.in.gov/iedc/sbir](http://www.in.gov/iedc/sbir)

## **State Science and Technology Institute**

State Science and Technology Institute (SSTI) is a national nonprofit organization dedicated to improving government-industry programs that encourage economic growth through the application of science and technology. As the most comprehensive resource available for those involved in technology-based economic development, SSTI offers the services that are needed to help build tech-based economies.

State Science and Technology Institute  
5015 Pine Creek Drive  
Westerville, Ohio 43081  
Ph: (614) 901.1690  
[www.ssti.org](http://www.ssti.org)

## **TechPoint**

Techpoint represents a unique blend of tech savvy corporate members, including publicly traded companies, private businesses, colleges and research universities, and local economic development organizations. The group's mission is to transform Indiana into a recognized technology leader by developing relevant policy, catalyzing change and measuring the state's progress.

Founded in December 2002, Techpoint represents hundreds of corporate members throughout Indiana. Techpoint promotes technology-based enterprise and economic development through public policy advocacy and government lobbying, educational and networking programs for its members and the public, and strategic economic development initiatives.

TechPoint serves as an advocate for proactive changes that enhance technology-based industry and employment in Indiana. The organization serves as a resource and partner in promoting the growth of technology-based, high-wage jobs and high-margin businesses across Indiana and provides quality programming, networking and educational and mentoring opportunities for its members, as well as business services and resources that facilitate growth and competitiveness.

# Business and Industry Resources

TechPoint programs include:

- *New Economy New Rules: Monthly technology briefings from industry experts, held in Indianapolis and remotely broadcast to video over a dozen locations around the state.*
- *Mira Awards: Annual awards honor, celebrate, and publicize the state's top technology companies, products, and individuals who have made an impact on Indiana's tech industry.*
- *Indiana Technology Summit: The only statewide technology event that includes a dynamic mix of keynote presentations, plenary and breakout panel discussions, networking opportunities and dozens of individual exhibitors.*

TechPoint  
7820 Innovation Boulevard  
Suite 220  
Indianapolis, IN 46278  
Ph: (317) 275.2080  
[www.techpoint.org](http://www.techpoint.org)

## **Lilly Endowment Inc.**

Indianapolis-based Lilly Endowment Inc., one of the nation's largest private foundations, has a broad range of grantmaking interests in community development, education and religion.

The Endowment's grants to raise the educational attainment levels of Indiana residents and build the state's intellectual capital have had a positive impact on the Indiana life sciences efforts. Recent noteworthy grantmaking includes:

Butler University and Purdue University – \$25 million each to improve and extend educational and research efforts of pharmacy schools (2006).

- *Indiana University – Indiana Genomics Initiative (INGEN), \$155 million (two grants: 2000 and 2002); METACyt (Metabolomics and Cytomics) Initiative, \$53 million (2004)*
- *Purdue University – \$50.6 million for developments in Discovery Park (two grants: 2001 and 2004)*
- *Support of charitable and educational activities of BioCrossroadsthrough grants to the CICP (Central Indiana Corporate Partnership) Foundation – More than \$10 million since 1999*
- *Rose-Hulman Institute of Technology – Rose-Hulman Ventures, \$54.7 million (two grants: 1999 and 2004, portions of which relate to life sciences)*

The Endowment in 2004 launched a \$100 million Initiative to Recruit and Retain Intellectual Capital for Indiana through which it funded a variety of efforts to enhance faculty and student recruitment and retention at Indiana colleges and universities. These efforts included constructing and enhancing science labs and establishing scholarships, endowed chairs and faculty research grant programs.

Lilly Endowment was founded in 1937 by three members of the Lilly family through gifts of stock in their pharmaceutical business, Eli Lilly and Company. The Endowment, however, is a separate entity from the company, with a distinct governing board, staff and location.

Lilly Endowment Inc.  
2801 N. Meridian Street  
Indianapolis, IN 46208  
Ph: (317) 924.5471  
[www.lillyendowment.org](http://www.lillyendowment.org)

## *Business and Industry Resources*

### **Venture Club of Indiana**

The Venture Club of Indiana's mission is to be a catalyst for the creation and growth of entrepreneurial businesses by providing a unique environment in which sources of capital, entrepreneurs and business professionals interact, connect, share information, collaborate and create business opportunities.

Venture Club of Indiana  
135 N. Pennsylvania  
Indianapolis, IN 46204  
Ph: (317) 684.5011  
[www.ventureclub.org](http://www.ventureclub.org)

# *Business Incubators and Certified Technology Parks*

Indiana strives to help entrepreneurs – especially those in the life sciences industry. The state boasts many business incubators to help encourage the growth of start-up companies.

Indiana's Certified Technology Park (CTP) program was formed to create special tax districts to encourage the development of technology incubators, to leverage the intellectual and equipment resources of nearby universities and to attract talented technology entrepreneurs. Under the CTP program, 100 percent of state income and sales taxes generated by businesses located in technology parks are used to finance the technical, environmental and capital improvement projects for public use areas within the park.

The technology park program serves to encourage the location of high-technology businesses within areas identified by local redevelopment commissions. Many of Indiana's Certified Technology Parks are involved in nurturing life sciences companies and organizations. A growing number of CTP incubator and start-up companies foster university and industrial collaboration for major life science initiatives and bioscience development.

## **Flagship Enterprise Center**

The Flagship Enterprise Center serves as a small business incubator and growth stage business accelerator. Through its client-specific Client Support Program, the center helps emerging companies to become independently viable. In the primary facility located at Exit 22 on I-69 in Anderson, and in other facilities in and around Anderson, the Flagship Enterprise Center provides ongoing contact with management consultants, university researchers, local businesses, student mentoring opportunities and access to capital.

As the region's premier "Open Door" incubator, the center accommodates a wide range of clients on a professional consultative basis. This approach often includes some combination of academic, economic development and other commercial entities joining in a collaborative effort to meet a specific client's needs. This innovative center for education, business incubation, technology transfer, and training plays a vital role in the creation of new business, the attraction of business from outside the region, the retention of existing business in Anderson and surrounding area, and, for the expansion of promising business organizations which currently operate in central Indiana.

The Flagship is a place where new start-ups and spin-offs can be nurtured and supported by existing business leaders, faculty, students, local and state governmental entities, technical experts from across the nation, and venture capitalists. Developed through a unique relationship between Anderson University and the city of Anderson, the center has a strong connection to higher education. An adjoining facility, currently under construction, will facilitate program offerings of the Anderson University's Falls School of Business and Purdue's College of Technology.

Flagship Enterprise Center  
2701 Enterprise Drive  
Anderson, IN 46013  
Ph: (765) 622-0100  
[www.flagshipenterprise.org](http://www.flagshipenterprise.org)

## **Hammond Incubator**

The city of Hammond is slated to open its first business incubator in the spring of 2007. The Hammond incubator will be located in the city's technology park in downtown Hammond.

The incubator is a partnership between the city of Hammond, state of Indiana and Purdue University Calumet. The 12,000 square foot facility will consist of 12 to 15 small business offices and two conference/board rooms that will be set up for all IT presentations. Purdue University Calumet will provide an entrepreneurship satellite office within the Hammond Incubator.

The Hammond Incubator will be a place where start-up companies can obtain the needed support and expertise to grow and thrive as a successful business. Hammond is looking for the incubator to be a catalyst for future growth downtown area and become a leading facility for growing transportation and logistics companies.

# *Business Incubators and Certified Technology Parks*

The incubator's long-term goal is to nurture businesses and help them grow in revenue and job creation all while retaining these businesses in Hammond and the Northwest Indiana area.

Hammond Incubator  
5209 Hohman Ave  
Hammond, IN 46320  
Ph: (219) 853.6508  
[www.gohammond.com](http://www.gohammond.com)

## **Growth Alliance for Greater Evansville/Innovation Pointe**

The Growth Alliance for Greater Evansville (GAGE) is the official economic development service provider for the city of Evansville and Vanderburgh County.

The new organization will provide, either directly or through key partnerships, many services designed to boost the Evansville-Vanderburgh economic development efforts, including business and industry park development and support, business diagnostics and direct business assistance, business planning guidance, and entrepreneur training and development.

GAGE couples an array of economic development resources, including Evansville's incubator development efforts and Innovation Pointe, the city's certified technology park. The organization's entrepreneurial development division will also partner with the University of Southern Indiana for targeted entrepreneur support and training assistance.

Growth Alliance for Greater Evansville/Innovation Pointe  
318 Main Street  
Evansville, IN 47708  
Ph: (812) 426-9991  
[www.innovationpointe.net](http://www.innovationpointe.net)

## **Infotech Park**

Located in Columbus, Infotech Park is a 67 acre project with a high-technology infrastructure. The campus-like park is being offered to an array of companies involved in information technology, advanced manufacturing and life sciences.

Indusites, Inc., a consortium of local businesses, in partnership with the city of Columbus and the Board of Aviation Commissioners of the Columbus Regional Airport developed and built Infotech Park. The purpose of Infotech Park is to create a state-of-the-art environment for highly specialized companies to build or lease facilities in which to locate their organizations. Infotech Park will offer fiber optic and high speed wireless access.

The park is located adjacent to the campuses of Indiana University - Purdue University (IUPUC) and Ivy Tech Community College. The Columbus Learning Center is located between their two campuses. The location of the Infotech Park was selected specifically to allow resident companies to take advantage of the technical training and other educational opportunities.

The Columbus Enterprise Development Center is located adjacent to Infotech Park. This location allows companies in the incubation stages to take advantage of the infrastructure available at Infotech Park and a place to grow after leaving the center.

Infotech Park  
700 Washington Street  
Columbus, IN 47201  
Ph: (812) 378.1721  
[www.columbusinfotechpark.com](http://www.columbusinfotechpark.com)

# *Business Incubators and Certified Technology Parks*

## **Indiana University Emerging Technologies Center**

The Indiana University Emerging Technologies Center functions as a business incubator and accelerator for life sciences, biotechnology and bioinformatics companies.

The IUETC is dedicated to the mission of promoting Indiana University-Industry partnerships to foster economic growth. The companies entering the IUETC benefit from direct university contact and the support of the entire Indiana business community. The companies' business ventures must support health and life sciences technologies that will ultimately lead to economic gains and employment opportunities in Indiana.

Indiana University Emerging Technologies Center  
351 W. 10th Street  
Indianapolis, IN 46202  
Ph: (317) 278.4100  
[www.iuetc.org](http://www.iuetc.org)

## **Intelliplex**

Intelliplex is a CTP dedicated to the life sciences. The park functions like a not-for-profit corporation by reinvesting its proceeds to further enhance its state-of-the-art technology and infrastructure. Intelliplex provides business residents with an affordable solution to advanced technology needs by providing unmatched value in advanced fiber optics, VOIP, telecommunications, environmental design, educational support and financial incentives.

The Intelliplex technical advantage is based on the park's unique "Local Toll By-pass Model." This design, which features multiple fiber optic lines owned by the Shelby County Fiber Optic Board, eliminates secondary broadband carriers and the hefty charges associated with purchasing bandwidth over their line routes. This approach offers businesses exceptional value and an opportunity to bundle, broadband, telephone and video contracts to secure the lowest cost.

The state CTP program allows Intelliplex to stay current with new technical developments and maintain its position as Indiana's most technically advanced and affordable life sciences park.

Intelliplex  
54 West Broadway  
Suite 2  
Shelbyville, IN 46176  
Ph: (317) 398.8533  
[www.intelliplex.org](http://www.intelliplex.org)

## **Inventrek Technology Park**

Inventrek Technology Park is a 96,000 square foot facility located on 29 acres in Kokomo. The park includes 58,000 square feet of leasable office space, 22,000 square feet of warehouse or manufacturing space with one dock and four drive-in doors, and more than 350 parking spaces. Recently, three leasable 800 square foot "hotel laboratories" have been constructed at Inventrek Technology Park.

The purpose of Inventrek is to encourage the development of high-tech business by providing business services and an atmosphere in which they can thrive and prosper.

The park helps emerging high-tech businesses to accelerate their launch timetable and minimize technology, market and execution risks by providing a variety of core business development and on-site support services. Inventrek provides access to cost-effective and flexible rental space, shared basic services and equipment, product development services and assistance in obtaining the financing necessary for company growth.

Inventrek Technology Park  
700 E. Firmin Street  
Kokomo, IN 46902  
Ph: (765) 854.0443  
[www.inventrek.org](http://www.inventrek.org)

# *Business Incubators and Certified Technology Parks*

## **inVenture**

Located in the Indiana University Research Park, inVenture is Bloomington's technology business incubator and entrepreneurial service center. inVenture provides management support and shared services to innovative, technology- and research-based businesses. inVenture is a partnership between Indiana University, the Small Business Development Center, City of Bloomington, Bloomington Economic Development Corporation, and the Greater Bloomington Chamber of Commerce.

inVenture  
501 N. Morton Street  
Suite 100  
Bloomington, IN 47404  
Ph: (812) 335.7356  
[www.inventuretech.com](http://www.inventuretech.com)

## **Muncie Certified Technology Park**

The Muncie Certified Technology Park is located near Ball Memorial Hospital, Ball State University and downtown Muncie, which provides an environment ripe with possibilities for park tenants.

Two existing anchor tenants, Ontario Systems and PA Labs, LLC, now employ nearly 1,000 workers, making the Muncie Certified Technology Park one of Indiana's largest in terms of employees.

To complement Ontario Systems and PA Labs, LLC, a key goal for the tech park is to secure grant support to build a facility for the growing Innovation Connector. Currently, the Innovation Connector houses seven technology related companies with more than 25 employees. Moving the evolving Innovation Connector to the Certified Technology Park will improve efforts in the park and will advance the success of residents in the Connector.

Ball State University has pledged to provide tenants with access to faculty members as well as professional and technology staffs who can provide special expertise with the development of product prototypes, market research, financial management, accounting services, advisory board members, specialized processes and procedures assistance for licensing and technology transfer, and so on.

Muncie Certified Technology Park  
401 S. High Street  
Muncie, IN 47305  
Ph: (765) 288.6681  
[www.muncie.com](http://www.muncie.com)

## **Northeast Indiana Innovation Center**

The Innovation Center is dedicated to developing ideas and growing businesses by fostering an environment of innovation and providing a wealth of essential business resources to accelerate growth.

The innovation center nurtures technology businesses by developing the venture during start-up, early development and growth stages. The center has 13 wet/dry furnished labs in a high security bioscience wing with a biomedical common equipment room offering shared services including autoclave, freeze-dryer, sterilizer, refrigerator/freezer, R/O water and more.

Northeast Indiana Innovation Center  
3201 Stellhorn Road  
Fort Wayne, IN 46815  
Ph: (260) 407.6442  
[www.niic.net](http://www.niic.net)



# *Business Incubators and Certified Technology Parks*

## **Purdue Research Park**

On 591 acres just north of Purdue University exists the greatest cluster of technology-related companies in Indiana. More than 140 companies call Purdue Research Park home, with 90 firms operating in technology fields and 28 of these specifically dedicated to life sciences.

Under development by Purdue Research Foundation, a private, nonprofit foundation created to assist Purdue, Purdue Research Park lays claim to the largest university-affiliated, business incubation complex in the country. Since the late 1990s when the park began offering business development support, the incubator has launched 22 technology ventures.

Purdue Research Park's nationally recognized technology transfer and business acceleration programs are attracting knowledge-based businesses to Indiana, launching new startups powered by Purdue-generated innovation, and increasing the number of high-tech collaborations with the university. Many of the innovations that emerge from the groundbreaking, interdisciplinary research underway at Purdue's Discovery Park will find their "business legs" at Purdue Research Park.

Life sciences companies at Purdue Research Park include publicly-traded BASi Inc. and privately-owned SSCI Inc., Endocyte Inc., Cook Biotech Inc. and Quadraspec Inc. The park even has its own boutique-sized, pharmaceutical manufacturing plant – the Chao Center – that is one of only a handful of university-affiliated operations in the United States. Whether the companies are focused on drug development, tissue-engineering or biomedical devices, the park provides all with an interactive and supportive environment through membership in its Life Sciences Research Council.

In addition, the park serves as a model for the majority of certified technology parks in Indiana as well as for the three Purdue Research Foundation-owned and operated satellite incubators: the Purdue Technology Center of Northwest Indiana in Merrillville; the Purdue Technology Center of Indianapolis; and the Purdue Technology Center of New Albany, now under construction.

Purdue Research Park  
3000 Kent Avenue  
West Lafayette, IN 47906  
Ph: (765) 494.8645  
[www.purdueresearchpark.com](http://www.purdueresearchpark.com)

## **Rose-Hulman Ventures**

Rose-Hulman Ventures (RHV), a program of Rose-Hulman Institute of Technology, brings together outstanding students with technology-based companies.

Each year, Rose-Hulman Ventures offers 300 internships to students working with approximately 15 client companies. With 50 percent of RHV's clients in the areas of medical devices or medical technology, the organization provides technical expertise to companies by completing the design, prototyping and testing of commercial products and services with project terms of confidentiality and intellectual property favorable to client companies.

Students receive the best engineering professional practice experience possible within an academic program, while client companies receive prototypes, refined designs of existing products, and expanded engineering capabilities. Full-time project managers at RHV lead multidisciplinary teams of students, which increases the efficiency of the teams' activity.

Since the start of the program in 1999, Rose-Hulman Ventures has worked with 70 companies and offered more than 1,300 internships. Rose-Hulman Ventures is located in a 35,000 square-foot facility in a CTP on the south campus of Rose-Hulman Institute of Technology in Terre Haute.

Rose-Hulman Ventures  
1000 S. Campus Drive  
P.O. Box 3790  
Terre Haute, IN 47803  
Ph: (812) 244.4000  
[www.rhventures.org](http://www.rhventures.org)

# *Business Incubators and Certified Technology Parks*

## **Uptown Innovation Center**

The Uptown Richmond Innovation Center, east central Indiana's first business incubator, officially opened its doors on March 1, 2004. It was developed with a public- private partnership between the city of Richmond, Main Street Richmond Wayne County, Indiana Construction Partnership and local companies, organizations, foundations and corporations. The \$1.4 million, 10,000 sq. ft. facility houses a 10 suite business incubator, state-of-the-art training facility, formal board room and video conferencing rooms. It also houses anchor tenants, Main Street Richmond Wayne County and the Urban Enterprise Association of Richmond.

The goal of the Uptown Richmond Innovation Center is to diversify the area economy while strategically positioning uptown Richmond for growth, investment and job creation. The facility is designed to create an environment which would foster entrepreneurship, allowing not only young companies to grow and develop but strengthen existing local companies as well, ultimately resulting in a stronger local economy.

The Uptown Innovation Center is a place where an entrepreneur has the opportunity not only to develop and commercialize their innovative products, but also has the needed support and services required to guide them through those difficult start up years in a compelling, magnetic environment with a high level of camaraderie and synergy.

Uptown Innovation Center  
814 E. Main Street  
Richmond, IN 47374  
Ph: (765) 962.8151  
[www.rwcstartup.com](http://www.rwcstartup.com)

## **West Gate @ Crane Technology Park**

Located in the heart of southern Indiana, the West Gate @ Crane Technology Park offers outstanding growth opportunities for Fortune 500 companies and entrepreneurs alike. A short distance from the median center of the U.S. population, the West Gate is easily accessible by road or rail. A technology business incubator and accelerator are planned for future construction.

More than 1,000 scientists, engineers and technical professionals are included in the 4,000 civilian employees who work at the Crane military facility near the park. Cooperative agreements between the military technical facility and major research universities and Fortune 500 companies enable strong commercial links for companies desiring to achieve rapid technology development and deployment. The park is expected to become Indiana's showcase technology facility for intelligent and environmentally balanced development.

West Gate @ Crane Technology Park  
P.O. Box 191  
Washington, IN 47501  
Ph: (812) 254.1500  
[www.westgatecrane.com](http://www.westgatecrane.com)

# *Science and Technology Resources*

## **Bindley Bioscience Center**

The Bindley Bioscience Center at Purdue University blends life sciences and engineering research to cultivate and support innovative, multi-investigator, interdisciplinary research teams at Discovery Park, Purdue's interdisciplinary research hub.

Research and development efforts of the Center foster engagement activities with both private commercial entities and other academic/non-government research institutions in support of economic development initiatives in the biotechnology industry across the state, region, nation and world.

Researchers in Bindley Bioscience Center are leading the way in innovative technology developments and applications for proteomic, metabolomic and cellular analysis tools that are coupled with advanced data management and mining systems to enable discovery and new understanding of biological systems. These innovations are providing fundamental knowledge and development of technology to address a wide range of complex bioscience research questions. For example, development and validation of technologies for cancer biomarker identification and clinical application provides the entry point for proteomic and metabolomic evaluation of multiple biological systems. Similarly, engineering approaches enable new nanoscale technologies leading to designs for microscale devices that use proteins, DNA, and even living cells to rapidly detect substances in blood, air, water and food.

Bindley Bioscience Center  
1203 W. State Street  
Purdue University  
West Lafayette, IN 47907-2057  
Ph: (765) 494.4600  
[www.purdue.edu/bbc](http://www.purdue.edu/bbc)

## **Birck Nanotechnology Center**

The Birck Nanotechnology Center is a leading-edge national center that is advancing the frontiers of nanoscale research. Nanotechnology is an emerging science in which new materials and tiny structures are built atom-by-atom, or molecule-by-molecule, instead of the more conventional approach of sculpting parts from pre-existing materials. Just as antibiotics, the silicon transistor and plastics affected nearly every aspect of society in the 20th century, nanotechnology is expected to have profound influences in the 21st century. Six types of laboratory space are in the facility: clean room, biology, chemistry, epitaxial growth, measurement and characterization, and a nanotechnology incubator.

Birck Nanotechnology Center  
Purdue University  
1205 W. State Street  
West Lafayette, IN 47907-2057  
Ph: (765) 494.7053  
[www.nano.purdue.edu](http://www.nano.purdue.edu)

# *Science and Technology Resources*

## **Center for Global Health and Infectious Diseases**

The Center for Global Health and Infectious Diseases (CGHID) is an interdisciplinary group of the University of Notre Dame faculty. This center is committed to the research and teaching that is focused on human pathogens and their invertebrate and vertebrate vectors, the diseases caused by these organisms, and the impact of these diseases on human society. Members of CGHID are concerned in particular with the impact of infectious diseases in less developed parts of the world, and research interests of center members range from biomedical science to issues of human rights.

Center for Global Health and Infectious Diseases  
P.O. Box 369  
Department of Biological Sciences  
Notre Dame, IN 46556-0369  
Ph: (574) 631.8045  
<http://cghid.bio.nd.edu>

## **Center for Nano Science and Technology**

The Center for Nano Science and Technology at the University of Notre Dame explores new device concepts and associated circuit architectures that are enabled by novel phenomena on the nanometer scale. The center catalyzes multidisciplinary research and education at the intersection between chemistry and biochemistry, physics, electrical engineering, computer science and engineering.

Center for Nano Science and Technology  
Department of Electrical Engineering  
University of Notre Dame  
Notre Dame, IN 46556  
Ph: (574) 631.5480  
<http://nano.nd.edu/>

## **Center for the Environment**

The Center for the Environment is an interdisciplinary research center at Purdue's Discovery Park. The Center's mission is to enhance environmental integrity with enlightened stewardship and innovative monitoring, modeling, and management of natural resources to facilitate expanded economic development and improved quality of life. By bringing together faculty from the environmental sciences, engineering, policy, and economics, the center creates synergies that will lead to innovative solutions for monitoring, modeling and management.

The Center also serves as a focal point for engaging stakeholders in the environmental science, regulatory, and management communities.

The Center serves as a resource for more than 130 faculty and staff in 27 different departments by providing a network for communication and assisting in project development and coordination. The center works very closely with other centers in Discovery Park, like the Energy Center, Cyber Center, and Bindley Biosciences.

Center for the Environment  
503 Northwestern Avenue  
West Lafayette, IN 47907  
Ph: (765) 494.5146  
[www.discoverypark.purdue.edu](http://www.discoverypark.purdue.edu)

# *Science and Technology Resources*

## **Crane Division, Naval Surface Warfare Center**

Crane Division, Naval Surface Warfare Center (NSWC Crane) located in Crane, Indiana, is a shore command of the U.S. Navy under the Naval Sea Systems Command and Naval Surface Warfare Center, which are headquartered in Washington, D.C.

NSWC Crane consists of three primary mission focus areas: Strategic Missions (Offensive Strike and Defensive Systems); Special Missions (Specialized Munitions and Weapons); and Electronic Warfare/Information Operations (Electronic Countermeasures and Surveillance). NSWC Crane is responsible for the development, acquisition and fleet support of these systems, and maintains an off-site detachment in Fallbrook, Calif. NSWC Crane supports the U.S. Navy fleet around the world through the use of Distance Support Technology.

Crane Division  
Naval Surface Warfare Center  
Technology Transfer Program  
NAVSURFWARCENDIV  
300 Highway 361  
Crane, IN 47522  
Ph: (812) 854.1762  
[www.crane.navy.mil](http://www.crane.navy.mil)

## **e-Enterprise Center**

The mission of the e-Enterprise Center is to seed, nurture, and execute large-scale research projects that involve applying computing, project management, and information technology principles to address real-world challenges.

The e-Enterprise Center develops in collaboration with other Discovery Park Centers, cyber environments that promote collaborative and integrative team decision making to solve day to day challenges in the extended life sciences research (from bench to bed-side) by fusing IT technologies with systems engineering methodologies. Examples include, Purdue Discovery Pipeline, the Purdue Ionomics Information Management System, (PiIMS).

In addition to this, the e-Enterprise Center also develops focused research networks such as the Regenstrief Center for Healthcare Engineering and the Purdue Homeland Security Institute to tackle society's grand challenges in life sciences.

e-Enterprise Center  
1201 W. State Street  
Burton D. Morgan Building, 229  
Purdue University  
West Lafayette, IN 47907-2057  
Ph: (765) 494.3153  
<http://www.purdue.edu/discoverypark/e-enterprise>

# *Science and Technology Resources*

## **Global Research Network Operations Center**

The Global Research Network Operations Center (Global NOC) at Indiana University provides engineering and operations services for leading high performance research and education (R&E) networks, for international connections to U.S., global R&E networks, and grid operations.

The mission of the Global NOC is to create and maintain the world's most advanced network engineering and operations service organization for global high performance research and education networking, thereby enabling the advancement of global research and education networks and the applications that utilize those networks.

Global Research Network Operations Center  
535 W. Michigan Street  
Room 324  
Indianapolis, IN 46202  
Ph: (317) 278.6630  
<http://globalnoc.iu.edu>

## **Human Performance Laboratory**

The Human Performance Laboratory (HPL) at Ball State University was founded in 1965 and has a long history of applied exercise physiology research and training graduate students at the master and doctoral level.

The HPL has been involved in a variety of applied research topics since its inception, including carbohydrate metabolism, heat stress, fluid balance, over-training and tapering in runners, swimmers, and cyclists. This applied approach continues today with the focus on limits of human performance and clinical investigations of aging, space flight, bed rest, children, and metabolic health to name a few. The research conducted in the HPL focuses on the positive aspects of exercise as applied to sports performance and various clinical conditions of human health. The majority of the research has been supported by external funding sources, including the National Institutes of Health, National Aeronautics and Space Administration, and private agencies. These funded projects have resulted in more than 500 scientific publications.

The graduate program includes master's degrees in exercise physiology and clinical exercise physiology, and a Ph.D. program in Human Bioenergetics that allows students to focus on an area of specialization that suits their interest and abilities. The training the students receive ranges from applied exercise physiology of human performance to basic physiology/biology and includes clinical aspects of exercise physiology. Thus, students get exposed to a broad range of fundamental aspects of human exercise physiology. This includes hands-on experience for all phases of the research while working closely with faculty and other graduate students to accomplish the goals of the laboratory.

Approximately half of the students who enter the HPL choose to concentrate the clinical exercise physiology program. This program involves working with a community based adult physical fitness program, laboratory testing and research, and cardiac, pulmonary, and oncology rehabilitation programs at Ball Memorial Hospital. The other half of the students who choose to focus their efforts on research may work with established investigators on grant projects.

The following advanced degrees are available: MA or MS in clinical exercise physiology, a MS in exercise physiology and a PhD in human bioenergetics.

Human Performance Laboratory  
Ball State University  
Health and Physical Activity Building  
Muncie, IN 47306  
Ph: (765) 285.1158  
[www.bsu.edu/hpl](http://www.bsu.edu/hpl)

# *Science and Technology Resources*

## **Indiana University Research & Technology Corp.**

The Indiana University Research & Technology Corporation (IURTC) is a not-for-profit agency that facilitates industry-Indiana University research and technology collaborations.

IURTC stimulates growth in Indiana's technology sectors by helping companies develop commercially viable technology, with the ultimate goal of creating jobs and growing the state's economy. As a technology transfer center, IURTC works to help businesses develop and commercialize new technologies.

IURTC's support of commercially promising research and technology development is of direct benefit to the economic vitality of Indiana, the Midwest and the United States.

Indiana University Research & Technology Corp.  
351 W. 10th Street  
Indianapolis, IN 46202  
Ph: (317) 278.1901  
<http://iurtc.iu.edu>

## **Notre Dame Interdisciplinary Center for the Study of Biocomplexity**

The goals of the Notre Dame Interdisciplinary Center for the Study of Biocomplexity is to understand in a quantitative and predictive way the complex patterns and organization that arise in living systems at length scales from molecular to ecological, leading to better understanding of the nature, prevention, and treatment of human diseases.

The Center focuses on becoming a true Center for the Study of Biocomplexity at the national and international level, providing opportunities to study and disseminate both experiment and theory at all levels. One of the Center's main goals is to improve communication between biological, mathematical, and physical scientists and involve undergraduate and graduate students into leading edge interdisciplinary bioresearch.

The Center develops new computational and modeling techniques and tools of broad utility to bioscientists and distributes these freely to the community at large.

The Center prepares undergraduate, graduate, and postdoctoral students for the challenges of 21st century biology, which require a merging of fundamental biological understanding and methods with physical, computational and mathematical approaches.

Notre Dame Interdisciplinary Center for the Study of Biocomplexity  
255 Hurley Hall  
University of Notre Dame  
Notre Dame, Indiana 46556  
Ph: (574) 631.4178  
[www.nd.edu/~icsb](http://www.nd.edu/~icsb)

## **Office of Industry Research & Technology Program**

The Office of Industry Research & Technology Program promotes partnerships between Purdue University and the private sector. The office provides a single point of access to Purdue's broad range of research resources.

Office of Industry Research & Technology Program  
610 Purdue Mall  
Hovde Hall of Administration  
West Lafayette, IN 47907  
Ph: (765) 494.0743  
[www.purdue.edu/research](http://www.purdue.edu/research)

# *Science and Technology Resources*

## **Office of Technology Commercialization**

The Office of Technology Commercialization within the Purdue Research Foundation serves Purdue University through the commercialization of its intellectual property. The Office of Technology Commercialization programs and services span a broad range of activities to accomplish this mission – making it one of the most comprehensive programs of its type among leading research universities.

Office of Technology Commercialization  
Purdue Research Foundation  
3000 Kent Avenue  
West Lafayette, IN 47906  
Ph: (765) 494.2610  
[www.prf.org/otc](http://www.prf.org/otc)

## **Oncological Sciences Center**

The Oncological Sciences Center (OSC) in Discovery Park Center is synergizing and applying the internationally recognized strengths of Purdue University in biological, chemical, engineering and human behavioral sciences to the cancer problem. The center blends basic cancer research and engineering research to cultivate and support interdisciplinary research teams.

Major OSC initiatives include Cancer Care Engineering, Cancer Prevention, Cancer and the Arts, and Cancer Research Translation in Indiana. The OSC partners closely with the NCI-designated Purdue Cancer Center and Indiana University Cancer Center and the Hoosier Oncology Group to enable these programs.

The OSC provides the infrastructure necessary to enable interdisciplinary cancer research and the translation of new knowledge into innovative, evidence-based strategies to strive toward the goal of cancer prevention and early stage detection and eradication to ultimately diminish the devastating effect cancer has on society.

Oncological Sciences Center  
Purdue University  
Discovery Park Center  
201 S. University Street  
West Lafayette, IN 47907-2064  
Ph: (765) 494.4674  
[www.purdue.edu/dp/oncological](http://www.purdue.edu/dp/oncological)

## **Purdue Genomics Initiative**

The mission of the Purdue Genomics Facility is the application of state-of-the-art genomics technologies to the development of sustainable agriculture in the 21st Century. Purdue Genomics is a three-part, integrated approach to genomic sciences. Three facilities – laboratory, database, and computation – provide a solid infrastructure for research, teaching, and extension efforts in this dynamic area.

Purdue Genomics Initiative  
Purdue University  
Genomics Center, WSLR  
West Lafayette, IN 47907  
Ph: (765) 496.6328  
[www.genomics.purdue.edu](http://www.genomics.purdue.edu)



# *Science and Technology Resources*

## **Rose-Hulman Ventures**

Rose-Hulman Ventures (RHV), a program of Rose-Hulman Institute of Technology, brings together outstanding students with technology-based companies.

Each year, Rose-Hulman Ventures offers 300 internships to students working with approximately 15 client companies. With 50 percent of RHV's clients in the areas of medical devices or medical technology, the organization provides technical expertise to companies by completing the design, prototyping and testing of commercial products and services with project terms of confidentiality and intellectual property favorable to client companies.

Students receive the best professional practice experience possible within an academic program, while client companies receive prototypes, refined designs of existing products, and expanded engineering capabilities. Full-time project managers at RHV lead multidisciplinary teams of students, which increases the efficiency of the teams' activities.

Since the start of the program in 1999, Rose-Hulman Ventures has worked with 70 companies and offered more than 1,300 internships.

Rose-Hulman Ventures  
1000 S. Campus Drive  
P.O. Box 3790  
Terre Haute, IN 47803  
Ph: (812) 244.4000  
[www.rhventures.org](http://www.rhventures.org)

## **Technology Transfer**

The goal of Technology Transfer at the University of Notre Dame is to provide a service to the university community while providing valuable new ideas to society. In this process, the Office of Research seeks to assist university developers of intellectual property in realizing the goals of their professional pursuits.

Technology Transfer  
University of Notre Dame  
Office of Research  
511 Main Building  
Notre Dame, IN 46556  
Ph: (574) 631.4551 / (574) 631.5158  
[www.nd.edu/~research/](http://www.nd.edu/~research/)

# *Intellectual and Industrial Collaborations*

Indiana's historic core of pharmaceutical companies, medical device designers and manufacturers, and major-league healthcare providers continually interacts with the financing and investing community, biotech entrepreneurs, academic centers and service organizations to help make the state a cradle for innovation. These partnerships provide the necessary resources to make Indiana a national and international life sciences center.

## **BioCrossroads**

BioCrossroads is a privately funded collaboration of life sciences leaders in Indiana that launches new life sciences businesses, provides money and support to life sciences businesses, expands science education and expands collaboration activities and encourages partnerships among Indiana's life sciences institutions.

BioCrossroads' commitment to growing new life sciences businesses based on areas of research strength has resulted in the development of two venture funds: the Indiana Seed Fund and the Indiana Future Fund; three start-up companies: Indiana Centers for Applied Protein Sciences, the Indiana Health Information Exchange and Novus Sport; numerous collaborations, including the Fairbanks Institute and the Biopharmaceutical Manufacturing Initiative; a young professionals network called Indy Hub and a new statewide K-12 science, technology, engineering and math resource network. In addition, BioCrossroads developed a statewide agriculture strategy which has since been adopted by the state of Indiana.

BioCrossroads  
300 N. Meridian Street  
Suite 950  
Indianapolis, IN 46204  
Ph: (317) 238.2450  
[www.biocrossroads.com](http://www.biocrossroads.com)

## **Fairbanks Institute**

Based in Indianapolis, the Fairbanks Institute utilizes comprehensive patient medical data, surveys and biologics to help predict, prevent and treat disease, starting with heart disease.

The institute capitalizes on the expertise of Indiana's world-class institutions, like the Indiana University School of Medicine, the Regenstrief Institute, the Indiana Center for Vascular Biology Medicine at Indiana University, and the Indiana University Center for Aging Research and their research capabilities. These assets, along with Indianapolis' population diversity and unique health behavioral characteristics, reflect Indianapolis' role as a leader in scientific discovery and innovation to prevent and treat disease. The entity was formed through BioCrossroads, Indiana's life sciences initiative, with funding from the Richard M. Fairbanks Foundation and Guidant Foundation.

Fairbanks Institute  
300 N. Meridian Street  
Suite 950  
Indianapolis, IN 46204  
<http://iucar.iu.edu/fairbanks/fairbanksinstitute.html>

# *Intellectual and Industrial Collaborations*

## **Indiana Centers for Applied Protein Sciences**

The Indiana Centers for Applied Protein Sciences (INCAPS) is a fee-for-service contract research organization with expertise in protein analysis, proteomics, technology validation and biomarker collaborations. The company offers multiple, state-of-the-art, mass spectrometry technologies coupled with proprietary sample preparation methods and quantification software. INCAPS provides a secure and confidential environment, and clients own all of the data generated. INCAPS was formed through BioCrossroads, Indiana's life sciences initiative, along with the state's leading academic and industry organizations.

Indiana Centers for Applied Protein Sciences  
351 W. 10th Street  
Suite 350  
Indianapolis, IN 46202  
Ph: (317) 278.0090  
[www.indianacaps.org](http://www.indianacaps.org)

## **Indiana Health Information Exchange, Inc.**

The Indiana Health Information Exchange (IHIE) is a non-profit corporation for sharing clinical information among healthcare providers and other health care entities.

The company uses a sophisticated, secure information exchange designed to protect patient privacy while at the same time enhancing the quality and efficiency of healthcare delivery. In addition, IHIE creates unparalleled research capabilities for health researchers and exhibits a successful model of health information exchange for the rest of the country.

In fact, IHIE is already regarded as a national leader in this area by the U.S. Department of Health and Human Services. It was recognized by *U.S. News & World Report* as being "...at the forefront of an effort to streamline the nation's chaotic healthcare delivery system." This success has placed IHIE in a leadership position, as demonstrated by its selection to participate in an \$18.5 million federal contract to establish a national model for transmitting healthcare information.

Indiana Health Information Exchange, Inc.  
846 N. Senate Avenue  
Suite 300  
Indianapolis, IN 46202  
Ph: (317) 644.1750  
[www.ihie.com](http://www.ihie.com)

## **Novus Sport**

Novus Sport was created in 2004 to recognize, champion and advance early-stage opportunities related to sports science and technology. Because of central Indiana's reputation as the collegiate and "Amateur Sports Capital of the World," Novus Sport is uniquely positioned to take advantage of new business opportunities in an area that is referred to as sports-related life sciences, which holds significant economic development opportunity for Indiana.

Novus Sport  
300 N. Meridian Street  
Suite 950  
Indianapolis, IN 46204  
Ph: (317) 238.7040  
[www.novussport.com](http://www.novussport.com)

# Workforce Assets

The Indiana Economic Development Corporation, the state's lead economic development organization, oversees many programs that provide incentives to companies that are creating jobs, improving worker skills, and raising income in Indiana.

## **Skills Enhancement Fund**

The Skills Enhancement Fund provides financial assistance to new and expanding companies committed to training their Indiana resident workforce. Eligible companies can receive reimbursement of up to 50 percent of eligible training costs. Indiana continues this commitment to training by allowing companies to re-apply for additional funds to retrain employees after a two-year period. The Indiana Economic Development Corporation administers this program.

## **The Technology Enhancement Certification for Hoosiers Fund**

The state has designed the Technology Enhancement Certification for Hoosiers (TECH) Fund to help Indiana companies meet the ever-growing demands of the new information economy. The TECH Fund provides financial assistance to companies to assist with training their information technology workers. The TECH Fund is a reimbursement grant program which provides financial assistance to existing companies that are committed to training their workers in the latest information technology skills. Eligible companies may receive reimbursement of up to \$50,000, \$2,500 per employee, or 50 percent of training costs, whichever is less.

## **Training Acceleration Grant**

With the rising use of advanced technology in manufacturing activities, education and training have become a major issue for life sciences and technology companies.

Indiana's Training Acceleration Grant program provides financial assistance to companies committed to expanding the skills of their workforce through training programs that result in industry-recognized credentials. The Indiana Economic Development Corporation and the Indiana Department of Workforce Development jointly administer this program.

## **Indianapolis Private Industry Council, Inc.**

The Indianapolis Private Industry Council, Inc., is the "go to" source for workforce development in central Indiana.

The Indianapolis Private Industry Council (IPIC) develops and disseminates relevant and timely information about the workforce and the economy; it has issued labor market studies about four crucial industries, including the life sciences, and is preparing three more. IPIC created Biotech Bound, an innovative program to prepare at-risk young adults to fill high-demand jobs in the life sciences.

IPIC secured a \$1 million federal grant in mid-2005 that is allowing it to address several challenges facing Central Indiana: a shortage of skilled health-care delivery workers; the capacity of the regional educational system to train more health-care workers; and the medical manufacturing and biotechnology industry's need for skilled workers. Part of that endeavor, BioWorks U, a virtual campus that allows young people to explore careers in biotechnology and health care, is scheduled to launch in June.

# Workforce Assets

## **Project Lead the Way**

Indiana is a lead state in developing a bio medical sciences curriculum for use nationally under Project Lead the Way (PLTW).

Project Lead the Way is a national non-profit organization established to help schools give students the knowledge they need to excel in high tech fields. Indiana has 160 schools (second in the country) utilizing the PLTW pre-engineering curriculum and professional development system. The challenging courses immerse students in real-world engineering problems that integrate math, science, technology, teamwork and communication skills to develop students' critical thinking and problem solving skills.

PLTW was recently recognized by the National Academy of Sciences as the model for K-12 curriculum that fosters high-quality teaching with world class curricula, standards and assessments of student learning. The academy also found that students participating in PLTW courses were better prepared for college engineering programs. Students also have opportunities for dual credit with several postsecondary institutions.

A similar program is being developed for a health curriculum called PLTW Biomedical Sciences. Lessons will engage students in rigorous and relevant hands-on problems related to the human body, cell biology, genetics, and diseases. Indiana will have 16 schools pilot this new curriculum during the 2007-08 school year. The goal of the program is to provide rigorous and relevant curriculum that is problem-based to engage and prepare high school students for the post-secondary education and training necessary for success in the wide variety of careers associated with the Biomedical Sciences including, physician, nurse, veterinarian, scientific and pharmaceutical researcher, therapist, and technician.

Indiana University Purdue University at Indianapolis will offer courses to prepare teachers to teach the PLTW Biomedical Sciences courses. Teachers must complete a rigorous two-week professional development course prior to teaching each high school course.

Purdue University School of Technology at Kokomo offers the rigorous two-week professional development courses to prepare teachers to teach the PLTW pre-engineering and engineering technology program.

## **Ivy Tech Community College**

As a statewide, open-access, community college, Ivy Tech Community College of Indiana provides residents of Indiana with professional, technical, transfer, and lifelong education for successful careers, personal development, and citizenship. Through its affordable, quality educational programs and services, the college strengthens Indiana's economy and enhances its cultural development.

Ivy Tech is the state's second largest college/university with more than 105,000 students. Ivy Tech offers degrees that result in good-paying jobs and credits that transfer. Funded in part with a \$2.5 million grant from the Lilly Endowment, Ivy Tech's biotechnology programs serve three key segments of Indiana's current and future economy: medical manufacturing, pharmaceuticals and agriculture.

Ivy Tech also offers an associate degree in biotechnology, just one of several new degree programs that are a result of Ivy Tech and Indiana University's partnership to boost the retention of college graduates in Indiana.

# Colleges and Universities

Indiana is home to 74 world-class colleges and universities, including such renowned names as Indiana University, Notre Dame, Purdue University, DePauw, Rose-Hulman and many others. These institutions play a significant role in making Indiana a leader in the life sciences, from helping mold young minds to nurturing new industries through research and incubation programs.

Indiana universities are pioneers in “future-tech” fields like nanotechnology and genomics. Multi-million dollar research parks and communications complexes are indicative of Indiana’s commitment to creating economic growth and opportunity through advanced technology and education.

Indiana’s universities have a long history of accolades:

- *Ball State University was named one of 13 “Institutions of Excellence in the First College Year” by the National Policy Center.*
- *Purdue University ranked among the top 25 public universities nationally, and its undergraduate programs in engineering and business are among the best in the national, according to U.S. News & World Report.*
- *DePauw University was ranked eighth among more than 800 liberal arts colleges as a source of top business executives, according to Standard & Poor’s and is a top source for Fortune 500 CEOs.*
- *Rose-Hulman Institute of Technology was named by U.S. News & World Report as the best undergraduate engineering school in the nation.*

## **Ball State University**

[www.bsu.edu](http://www.bsu.edu)

Ball State University began as a private normal school that opened in 1899.

Eventually, the campus and buildings were purchased by the Ball brothers, Muncie industrialists, and given to the state of Indiana in 1918. The institution became a university in 1965. More than 20,350 graduate and undergraduate students are enrolled on and off campus. Out-of-state students make up 10 percent of campus enrollment and students of color comprise 8 percent.

The university has completed a secure broadband wireless network that provides Internet access to students, faculty, and staff. Fiber optic voice, data, and visual networks link classrooms, laboratories, residence halls, and offices across campus. University Computing Services operates 12 general-purpose computer labs, including an adaptive technology lab, two computer-based testing labs, five graphics labs, and 164 college and departmental labs. In addition, more than 40 departmental labs are equipped to assist students.

## **College of Applied Sciences and Technology**

[www.bsu.edu/cast](http://www.bsu.edu/cast)

The College of Applied Sciences and Technology at Ball State University offers outstanding programs in nursing, dietetics, exercise science, and athletic training, among others. The college has one of the few aquatics majors in the nation and one of the few programs in gerontology at both the undergraduate and graduate levels. Ball State was recognized for offering the “most comprehensive graduate gerontology program in the state” by Derek Stepp, executive director of the Association for Gerontology in Higher Education.

Ball State’s online master’s degree program in nursing is ranked among the top eight in the nation by *U.S. News & World Report*, and nearly 100 percent of the nursing and dietetic students regularly pass important licensing exams.

The college is also home to the Biomechanics Lab, which performs research to further understanding of mechanical and neuromuscular characteristics of human movement, and the Human Performance Lab (HPL), which is internationally renowned for studying exercise and its effects on human physiology. HPL researchers currently are working with NASA astronauts and Russian cosmonauts to study the effects of long space missions on muscle tissue.

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## *School of Nursing*

[www.bsu.edu/nursing](http://www.bsu.edu/nursing)

The Ball State School of Nursing is committed to the philosophy of nursing across the lifespan. Nursing students learn to help people maintain health and wellness, as well as to care for ill individuals and groups. Ball State's programs allow students to pursue clinical study in a variety of health care settings, including hospitals, extended care facilities, clinics, homes, and community health agencies. Individual faculty attention and guidance ensures students will receive the support necessary for excellent learning experiences.

The mission at Ball State University School of Nursing is to promote academic and clinical challenge, achievement, teamwork, and problem solving.

- *Ball State's online master's program in nursing has been listed among the top eight in the country, according to U.S. News & World Report.*
- *The Baccalaureate and Master's Nursing Programs are accredited by the Commission on Collegiate Nursing Education. The Baccalaureate Nursing program is also approved by the Indiana State Board of Nursing.*

## *Human Performance Laboratory*

[www.bsu.edu/hpl](http://www.bsu.edu/hpl)

The Human Performance Laboratory, internationally known for studying exercise and its effects on human physiology, offers graduate programs in human bioenergetics and exercise physiology. The lab is located in a 16,000-square-foot building on the Ball State campus and contains a large general testing lab, a strength testing lab, a general biochemistry lab, an endocrine lab, a single fiber lab, physiology testing lab, and a molecular biology lab. These labs contain equipment for exercise testing, metabolic measurements, studies of environmental heat and cold stress, cardiovascular measurements, strength evaluation, body composition and bone health, and biochemical analysis of body tissue and fluids.

## *Biochemistry Laboratory*

The general biochemistry room is the basic laboratory equipped to do a variety of bench-top chemistries in the analysis of blood and muscle. It is the laboratory where single muscle fiber electrophoresis, staining, and Western blotting are done. It is also the source for the distilled water used in all the laboratories.

## *Endocrine Laboratory*

This laboratory is equipped with a gamma counter that enables researchers to measure plasma or tissue-derived hormone. The facility also houses the preparation and analysis site for the ongoing animal studies at the HPL.

Isolated muscles are exposed to in vitro incubation at the animal facility of the Indiana University School of Medicine-Muncie training facility on the Ball State campus and are then brought back to the Human Performance Lab Endocrinology for analysis.

## *Molecular Biology and Cell Laboratory*

One of the newest additions to the Human Performance Laboratory is the Molecular Biology and Cell Laboratory. A primary goal of the Molecular Biology and Cell Laboratory is to study changes in gene expression, especially at the level of transcriptional regulation.

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## *Physiological Testing Laboratory*

In the Physiological Testing Lab researchers test subjects on equipment such as treadmill or electrically braked cycle ergo meter. VO<sub>2</sub> measurements are made using Applied Electrochemistry oxygen and carbon dioxide analyzers with custom software.

## *Single Fiber Laboratory*

In the Single Fiber Laboratory, researchers are able to evaluate the physiological characteristics of muscle fibers. Using the specialized equipment and microscopic techniques allows for a measure of peak force and the maximal shortening velocity of individual fibers. The laboratory has used this technique to investigate muscle changes in subjects ranging from astronauts to the aging population.

## *Environmental Chamber*

The environmental chamber allows for simulation of exercise in various conditions. The chamber is capable of controlling temperature from 5 to 65 degrees Celsius as well as controlling humidity.

## *Refrigerator Room*

The refrigeration room houses five ultra freezers, which cool physiological samples to -80 degrees Celsius. The room also contains several conventional freezers and refrigerators.

## *Student Study Area*

One of the highlights of the Human Performance Laboratory is the importance of hands-on learning for students. To ensure that all students have ample opportunities to interact and participate in projects, each student is provided with an individual study carrel. The study area, housed within the Human Performance Laboratory, also provides wired and wireless Internet access for students.

## **Miller College of Business**

### *Entrepreneurship*

[www.bsu.edu/entrepreneurship](http://www.bsu.edu/entrepreneurship)

Ball State's graduate program in entrepreneurship – listed among the best in the nation in the latest rankings by *U.S. News & World Report* – prepares students for a dynamic, creative way of doing business that can be applied to new venture start-ups, as well as the corporate environment. Students gain insight into managing entrepreneurial growth and strategy and internal corporate venturing.

Completion of a major innovative project is a requirement for this 30-hour concentration. The project may be developed around a corporation's future strategic innovation or another entrepreneurial endeavor of particular interest.

Risk, vision, and spirit are at the heart of the remarkable success of the Ball State University Entrepreneurship Center, its programs, and graduates. Achieving top national rankings since it was founded more than 20 years ago, the program has become well known as the "ultimate entrepreneurial experience."

- *Ball State's undergraduate entrepreneurship program in the Miller College of Business is ranked sixth in the nation for entrepreneurship for 2007 by U.S. News & World Report. The program has been recognized among the top 10 programs in the nation for nine consecutive years.*



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- *The graduate program in entrepreneurship is ranked 25th in the nation for entrepreneurship for 2007 in U.S. News & World Report's rankings of top graduate programs offered by business schools.*

## **MBA**

[www.bsu.edu/MBA](http://www.bsu.edu/MBA)

The Ball State University Miller College of Business offers quality graduate programs that enable students to attain the advanced degree or certificate necessary to excel in today's global and digital business environment. Ball State offers a Graduate-level Certificate in Business and a Master of Business Administration.

Ball State University's MBA program provides professionals with the skills necessary to solve the critical problems of today's organizations. The university's program – available on campus or in a live, interactive, internet-based format – offers a practical, rigorous, academic business foundation, as well as the flexibility to choose electives relevant to individual career interests. Courses bring students face-to-face with professors in an environment where real problems can be analyzed and solved.

## **Indiana University**

[www.indiana.edu](http://www.indiana.edu)

Indiana University is internationally known for the quality of its academic programs and attracts students from all over the world.

Indiana University faculty has performed many “firsts” in Indiana, including transplants of the kidney, liver, cornea, bone marrow, pancreas, and infant and newborn hearts. At the same time, IU plays a key role in the economic and social well-being of Indiana residents, offering educational, cultural, and economic benefits to the state.

Indiana University has eight campuses: the original campus in Bloomington, which is a residential campus; an urban campus in Indianapolis, which also includes the IU Medical Center; and six regional campuses in the Indiana cities of Gary, South Bend, Fort Wayne, Kokomo, Richmond, and New Albany.

Indiana University has:

- *More than 98,000 students on its eight campuses*
- *934 degree programs*
- *Almost 495,000 living alumni, including 250,000 working in Indiana*
- *An annual operating budget of \$2.3 billion*
- *18,000 employees, including faculty and professional and support staff*
- *More than 150 research centers and institutes*
- *An endowment of more than \$1 billion*
- *Indiana University is home to the country's largest School of Nursing, with strong baccalaureate and research programs.*
- *More than 50 percent of Indiana's physicians, 64 percent of optometrists, 35 percent of teachers, 75 percent of lawyers, and 90 percent of dentists are IU graduates.*
- *The IU School of Medicine is the nation's second largest medical school.*
- *Indiana University is also home to the nation's largest university-based incubator.*

## **Indiana University School of Medicine**

[www.medicine.iu.edu](http://www.medicine.iu.edu)

The Indiana University School of Medicine is the nation's second largest medical school. The school holds more than \$220 million in research grants and contracts and hosts federally designated centers of excellence in cancer, kidney

## Colleges and Universities

disease, Alzheimer disease, alcohol research, arthritis, sexually transmitted disease centers on both the pediatric and adult levels, and women's health.

The affiliated Regenstrief Institute is an international leader in medical informatics. Research cores with expertise in such technologies as proteomics, genotyping, protein expression, high resolution microscopy and in-vivo imaging provide services to academic and private sector scientists. The school fosters an entrepreneurial culture and is producing growing numbers of intellectual property disclosures.

The IU School of Medicine has:

- *More than 1,300 medical and graduate degree students*
- *Education and research programs at eight regional campuses in addition to the Indianapolis campus*
- *More than 1,400 full and part-time faculty*
- *22 research centers and institutes*
- *19 research cores*
- *760,000 square feet of new research space built or under construction since 2000*

### *Center for Genomics and Bioinformatics*

[www.cgb.indiana.edu](http://www.cgb.indiana.edu)

The Center for Genomics and Bioinformatics (CGB) is a multidisciplinary research center that carries out independent research in genomics and bioinformatics.

The center is only five years old, but has already brought \$21 million to Indiana University in Bloomington, Indiana. The money is being used for research, mapping genomes and adding approximately 40 new scientists and faculty. The CGB has also received crucial financial support from two Lilly Endowment awards to Indiana University: the Indiana Genomics Initiative and the Indiana Metabolomics and Cytomics Initiative.

- *Indiana Genomics (INGEN) Initiative: The INGEN initiative creates a world-class biomedical enterprise, which encompasses the strengths of the IU School of Medicine and the IU Office of Information Technology. The initiative is driven by the new data resulting from the Human Genome Project, which maps the genetic sequence found in humans. This initiative will enable researchers to make radical discoveries to cure diseases and improve the quality of human health.*
- *Indiana Metabolomics and Cytomics (METACyt): The Indiana Metabolomics and Cytomics Initiative seeks to advance life sciences research and to assist with development of the life sciences industry in Indiana through its support of emerging biotech companies. METACyt research focuses on the emerging fields of metabolomics and cytomics, which shed light on cell metabolism and function. This research promises to answer vital questions about cancer and other diseases, leading to faster diagnoses and more effective health treatments. METACyt strives to ensure that life sciences discoveries result in a full range of scientific, educational and related economic benefits for Indiana.*

### *School of Informatics*

[www.informatics.indiana.edu](http://www.informatics.indiana.edu)

The nation's first School of Informatics is growing on the Indiana University campuses in Bloomington and Indianapolis, with 1,600 undergraduate majors now enrolled in Informatics, New Media and Computer academic programs. The School of Informatics offers a unique curriculum that combines IT concepts with another area of study, opening rewarding career opportunities for graduates.

Informatics studies the application of Information Technology to the arts, sciences and professions. The Indiana University School of Informatics has set as its goal to be nationally recognized as the foremost in the country for excellence and leadership in Informatics programs, including undergraduate and graduate education, research, placement and outreach.

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The School of Informatics offers MS degrees in Bioinformatics, Chemical Informatics, Human-Computer Interaction Design, Human-Computer Interaction (Music Informatics) Computer Science, New Media-Graduate Program, Laboratory Informatics and Health Informatics. The school also offers doctorate degrees in Informatics and Computer Science. Undergraduate degree programs also are offered at campuses in South Bend, Southeast (New Albany) and Kokomo.

The school is also at the forefront of research having just established the Informatics Research Institute, with two major federal grants at the outset. It also is the recipient of major research grants from the National Science Foundation and National Institutes of Health.

IU believes there is great need and opportunity for professionals trained in state-of-the-art information technology and science with an emphasis on creative human applications. There is an urgent need for graduates with education and experience in informatics, particularly with interdisciplinary skills. The School of Informatics will be foremost in the country to graduate professionals with formal preparation in Information Technology with subject area expertise.

- *Indiana University's School of Informatics is the very first of its kind in the country*
- *More than 1,000 students have graduated from Informatics degree programs since 2000*
- *More than 1,600 students are currently enrolled in Informatics programs*
- *IUPUI Informatics and Communications Technology Complex provides state-of-the-art classroom and research space*
- *The Informatics program is growing at South Bend and is planned for other IU campuses*

### *Department of Chemistry*

[www.chem.indiana.edu](http://www.chem.indiana.edu)

The Department of Chemistry at Indiana University is the center of excellence for synthetic organic chemistry, multiple aspects of analytical chemistry as well as a long history of distinguished contributions to theoretical chemistry.

Currently, the department is developing exciting new programs in many emerging interdisciplinary areas such as in materials chemistry, chemical biology, proteomics, and nanoscale structures. In spring of 2005, the Chemistry Department began construction of Simon Hall, a \$55.7 million multidisciplinary science research building. Upon completion in May of 2007, it will provide laboratories and offices for researchers from several disciplines including chemistry, biology and physics.

The Linda and Jack Gill Center for Biomolecular Science was established to advance the understanding of complex biological processes and to train next generation scientists in state-of-the-art biomolecular measurements, especially in the field of neuroscience. Collaborations include multiple external world-class institutions as well as associations with virtually all of the Bloomington-based science related departments, and the IU School of Medicine. A number of start-up biotechnology companies have emerged in the last year from work initiated at this department.

### *Department of Biology*

[www.bio.indiana.edu](http://www.bio.indiana.edu)

The Department of Biology at Indiana University combines a rich tradition of excellence with modern and multi-disciplinary coverage of the major areas of biology including animal behavior, biochemistry, cell biology, developmental biology, ecology, evolution, genetics, genomics, microbiology, molecular biology, and plant biology.

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## **The Johnson Center for Entrepreneurship & Innovation**

*Kelley School of Business*

[www.bus.indiana.edu/jcei](http://www.bus.indiana.edu/jcei)

The Johnson Center for Entrepreneurship and Innovation facilitates cross-campus entrepreneurial initiatives in the life sciences, biotechnology and other emerging technologies that foster the development of commercially viable enterprises.

The Kelley School of Business was ranked as the nation's fourth best Graduate Business School and the country's top Undergraduate Business for Entrepreneurship by *U.S. News & World Report*.

## **Purdue University**

[www.purdue.edu](http://www.purdue.edu)

Purdue University was founded in 1869 as Indiana's land grant university. Named after benefactor John Purdue, the co-educational university is one of the nation's leading research institutions with a reputation for excellent and affordable education.

System-wide enrollment is almost 70,000 students, representing 50 states and 130 countries. The statewide Purdue University system includes five campuses, but the main campus is in West Lafayette, Indiana, approximately 126 miles southeast of Chicago and 65 miles north of Indianapolis.

Building upon historical strengths in engineering and agriculture, the West Lafayette campus currently offers more than 7,400 courses in more than 500 undergraduate majors and specializations in the colleges of Agriculture, Consumer and Family Sciences, Education, Engineering, Health Sciences, Liberal Arts, Management, Nursing, Pharmacy and Pharmacal Sciences, Science, Technology, and Veterinary Medicine. Programs of graduate study and research leading to advanced degrees fall under the jurisdiction of the Graduate School.

- *Purdue University's graduate programs in engineering consistently rank among the best in the country, and our programs are getting stronger.*
- *According to the U.S. News & World Report publication, "America's Best Graduate Schools 2006," Purdue graduate engineering programs are ranked 10th overall among schools nationwide.*
- *The MBA program is ranked 18th by BusinessWeek in a listing of America's best executive MBA programs.*
- *Purdue Agriculture and Biology Engineering department was ranked first in the undergraduate specialty rankings for agricultural engineering.*

## **College of Engineering**

[www.engineering.purdue.edu](http://www.engineering.purdue.edu)

Since its founding in 1869, Purdue has built a reputation for educating outstanding engineers – people who create technological products and processes that make the world a better place.

Today, the Purdue engineering program is renowned as one of the largest and most respected engineering schools in the world. Purdue leads the nation as the institution that has granted the most engineering degrees to women. There are also nearly 6,300 undergraduates and more than 2,200 graduate students each year, who take a rigorous course of study, selecting from 13 ABET accredited programs or designing their own academic program.

Purdue's Weldon School of Biomedical Engineering dedicated its \$25 million biomedical engineering building in 2006. It is the only biomedical engineering program in Indiana.

*U.S. News & World Report* ranks Purdue's graduate engineering program sixth overall in the nation (April 2006) and its undergraduate engineering program eighth (August 2006).

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## Department of Biological Sciences

[www.bio.purdue.edu](http://www.bio.purdue.edu)

Research in the Department of Biological Sciences encompasses a broad range of subjects from studying the structure of molecules and viruses to entire ecosystems.

The study of the structure of molecules and viruses are conducted by members of the internationally recognized Markey Structural Biology Center. This group studies cellular signaling pathways, RNA catalysis, bioremediation, molecular evolution, viral entry, replication and viral pathogenesis using a combination of x-ray crystallography, electron cryo-microscopy, NMR spectroscopy, and advanced computational and modeling tools. To assist in these studies, the department was recently awarded a grant from the National Institutes of Health to fund the purchase of a new state-of-the-art electron microscope.

Several members of the department are members of the Purdue Cancer Center. The center is among an elite group of Cancer Centers nationwide to earn the distinguished National Cancer Institute (NCI) designation. One of just seven NCI-designated basic-research cancer centers in the United States, the center is committed to helping cancer patients by identifying new molecular targets and designing future agents and drugs for effectively detecting and treating cancer. A state-of-the art Transgenic Mouse Core Facility is operated through the center to serve members of the community.

The department's microbiology group is involved in two main research areas, microbial pathogenesis and environmental remediation. The scientists involved in microbial pathogenesis are working on cures for *Salmonella* (involved in food poisoning among others), *Legionella pneumophila* (cause of Legionnaires disease), and *herpesviruses* (causes diseases from the common cold to cancer). The scientists working on environmental remediation work on responses of microorganisms to heavy metals in the soil.

The department's neurobiology and physiology group are studying the nervous system from the cellular level to nerve function of the brain. The department also includes scientists studying ecology, evolution and population biology. They are studying these areas using genetic approaches working on conservation biology.

The department has eight undergraduate majors with a total of 800 students. Approximately 150 students graduate each year – going onto graduate school, professional school, or accepting positions in industry. The department has approximately 150 graduate students, the majority pursuing a PhD.

## Department of Chemistry

[www.chem.purdue.edu](http://www.chem.purdue.edu)

Purdue's Department of Chemistry has a long history of excellence in instrument development and has been consistently ranked as a top program in analytical chemistry.

Purdue scientists are working in a range of areas including advances in instrumentation miniaturization, mass spectrometry, proteomics, novel sensing devices, optical imaging, high-throughput NMR, novel assay devices, bio-analytical chemistry, and cancer detection. In addition, the department maintains expertise in drug delivery and design including: natural product organic chemistry, target directed synthesis, library design, targeting, membrane permeability, and novel materials.

Researchers are working on disease targets such as Alzheimer's, avian influenza, cancer, HIV, SARS, and resistant TB. The department is a world leader in folate-drug conjugates research, which is poised to make major advances in the treatment of many of the most pressing diseases facing humankind. The Department of Chemistry has more than 300 doctoral students and 250 undergraduate students enrolled for 2006-07.

*U.S. News & World Report* ranks Purdue's graduate analytical chemistry program second overall in the nation (April 2006)

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Broad research areas include:

- *Membranes*
- *Bioanalytical chemistry*
- *Proteomics*
- *Metabolomics*
- *Chemical biology*
- *Drug design*
- *Drug delivery*
- *Photo induced therapy*
- *Biological sensors*
- *Bioinorganic chemistry*
- *Bioinformatics*

## *Department of Physics*

[www.physics.purdue.edu](http://www.physics.purdue.edu)

Physics at Purdue has a long and rich history. The strength of Purdue's Department of Physics is its internationally recognized research in the areas of biophysics, high energy physics, geophysics, nanophysics, nuclear physics, sensor technology and astrophysics. How chlorophyll and hemoglobin work, the structure of black holes, the search for fundamental particles, the precise dating of Stonehenge, and new sensors for homeland defense are a few of the topics that drive the research.

The Purdue facilities, which include cleanrooms for the development and fabrication of microstructure silicon and gas detectors, are among the best in the nation. Faculty and students are studying the properties of diverse systems such as the single electron transistor, small ensembles of matter and the electronic properties of macroscopic materials. In addition, there is an active research program that focuses on biological systems.

Faculty also are probing the workings of gravity, "flying through" tumors, characterizing percolation in soil and rocks, and determining the ages of geological features. The Purdue Rare Isotope Measurement Laboratory (PRIME Lab) is one of only a few facilities in the nation capable of measuring very low concentrations of the natural and man-made radio-nuclides, using accelerator mass spectrometry (AMS). Although the instruments and detection methods are those of nuclear physics, research applications are concentrated in the Earth sciences and biomedical sciences.

Purdue's Department of Physics enrolled 148 graduate students and 186 undergraduate students in 2006.

## *Discovery Park*

[www.purdue.edu/discoverypark](http://www.purdue.edu/discoverypark)

Purdue University is host to Discovery Park, a 40-acre collection of interdisciplinary research programs.

Unveiled in 2001, the park received \$26 million in support from the Lilly Endowment in January 2005, in addition to the \$25 million it received in 2001. Of the most recent \$25 million awarded, \$10 million is designated to the creation of four new interdisciplinary research centers.

The facilities and programs in the park have not been designed around existing academic disciplines at Purdue. Instead, the park has concentrated on new interdisciplinary areas that have the potential to hold great promise for new discoveries and new economic opportunities in the areas of entrepreneurship, systems analysis, advanced manufacturing, health-care engineering, nanotechnology, bioscience, innovative learning, cyber infrastructure, environment, cancer and energy.

Discovery Park was launched with four centers: Burton D. Morgan Center for Entrepreneurship, Birk Nanotechnology

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Center, Bindley Bioscience Center and e-Enterprise Center. The Center for Advanced Manufacturing and Discovery Learning Center joined Discovery Park two years later. With \$1 million from the Regenstrief Foundation in early 2005, Purdue also launched the Regenstrief Center for Healthcare Engineering, a center within e-Enterprise Center focused on applying systems-engineering principles to the health-care industry.

With the additional funding from the Lilly Endowment, Discovery Park launched the Cyber Center, Energy Center, Center for the Environment and the Oncological Sciences Center in January 2005.

Today, each center involves an interdisciplinary strategy for students to interact with new methods of research, new approaches to learning and new opportunities beyond the campus:

- *The Burton D. Morgan Center for Entrepreneurship has created strong ties with each center in the Discovery Park. The center teaches students and faculty strategies for economic development that come with breakthroughs in research and development.*
- *By offering nanotechnology research and development at Discovery Park, Purdue is becoming a national leader in this emerging science. The Birck Nanotechnology Center, a 187,000 square foot, state-of-the-art facility, is conducting significant research to improve the diagnosis of diseases and the use of new materials, structures and devices to help the diagnosis process. Additionally, Birck has incorporated an incubator into its overall plan to support and conduct tech transfers and entrepreneurship.*
- *Life sciences and engineering researchers in Bindley Bioscience Center are collaborating to explore new technologies and science that have broad implications in plant, animal, and human diseases. Researchers also examine technology development and basic research for large-scale analyses of proteins, metabolites, and cellular structure to foster a better understanding of biological systems.*
- *Center for Advanced Manufacturing, in conjunction with Indiana and Midwest manufacturers, focuses on research to develop and improve manufacturing processes, productivity, and materials. It also sponsors regional summits to address local challenges and explore research opportunities for collaboration.*
- *The mission of the e-Enterprise Center is to seed, nurture, and execute large-scale research projects that involve applying computing, project management, and information technology principles to address real-world challenges. In addition to the Regenstrief Center for Healthcare Engineering, this center also includes the Purdue Homeland Security Institute.*
- *At a time when the world's resources are being consumed at unprecedented rates, the Center for the Environment is examining how to protect the environment while sustaining a global economy. Center researchers study ways to model and predict the impact of activity on ecosystems, monitor environmental quality, manage natural resources, and develop technologies that will help create a cleaner environment.*
- *The Cyber Center is focused on creating systems and tools to disseminate and preserve scientific and engineering knowledge. Its infrastructure is based on distributed computer, information, and communication technologies.*
- *Projects in the Discovery Learning Center are examining the design and assessment of educational initiatives, innovative learning spaces, and advanced technologies to enhance the learning process and improve educational practices. This center also organizes undergraduate student internship programs for all of the centers in the park.*
- *Tackling a complex global issue, the Energy Center is researching energy alternatives, such as hydrogen, biofuels, solar and wind power, and how they can help reduce the nation's reliance on traditional fossil fuels as the primary energy source. Center researchers also are developing clean-coal technologies and studying how to use petroleum and natural gas resources more effectively and efficiently.*
- *The Oncological Sciences Center is focused on the national challenge to eliminate cancer as a cause of suffering and death by 2015 by drawing on research strengths in biological, chemical, engineering, life sciences and liberal arts, engineering, and chemical sciences. This center also applies complex modeling systems to study cancer patients and their response to a treatment or series of treatments.*



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## **Rose-Hulman Institute of Technology**

[www.rose-hulman.edu](http://www.rose-hulman.edu)

Rose-Hulman Institute of Technology is one of the nation's few private colleges that specialize in undergraduate engineering, mathematics, and science education.

Rose-Hulman has earned a reputation as one of the nation's leading independent colleges because of its educational philosophy that focuses on small classes, outstanding teachers, and an innovative curriculum, which are supported by modern facilities. The Rose-Hulman campus is located in a suburban area about five miles east of Terre Haute, Indiana.

In 2006, Rose-Hulman was ranked No. 1 by *U.S. News & World Report* magazine for the eighth consecutive year as the nation's best college that offers the master's degree in engineering as its highest degree. The 2004 edition of the *Kaplan/Newsweek College Guide* listed Rose-Hulman as one of the 12 "Hot Schools" in the country.

Rose-Hulman is among the nation's most interesting colleges, according to the editors of a college guide published by Kaplan and Simon and Schuster. The guide describes Rose-Hulman as "a science powerhouse" and a college where a degree holds a prestige few other schools can match.

- *For the eighth consecutive year, Rose-Hulman has been ranked No. 1 for its Undergraduate Engineering Program in U.S. News & World Report's "America's Best Colleges."*
- *Rose-Hulman was named No. 1 in five of the engineering departments that are evaluated by engineering deans and senior faculty: mechanical, electrical, civil, computer, and chemical.*
- *The 2004 edition of the Kaplan/Newsweek College Guide lists Rose-Hulman as one of the 12 "Hot Schools" in the country.*

## **Rose-Hulman Ventures**

[www.rhventures.org](http://www.rhventures.org)

Rose-Hulman Ventures, a department of Rose-Hulman Institute of Technology, provides educational opportunities for students and faculty while assisting technology-driven businesses. This unique combination creates career opportunities for new graduates and the development of innovative technologies and technology companies. Rose-Hulman Ventures is located on 180-acres in a 35,000 square-foot facility on the South Campus of Rose-Hulman Institute of Technology, a Certified Technology Park, in Terre Haute, Indiana. Rose-Hulman Ventures provides an exciting learning environment for students because the projects provide a realistic parallel between the technological learning environment and the technological workplace.

Since its inception, Rose-Hulman Ventures has provided 1,000 internship opportunities to 395 students ranging from the technical development of medical technology to analytical instrumentation. Students from Rose-Hulman have been significant contributors to the technology and business development activities of Rose-Hulman Ventures clients. At graduation, these internship experiences also help our graduates make a more immediate contribution to their new employer.

## **Department of Electrical and Computer Engineering**

[www.rose-hulman.edu/ece](http://www.rose-hulman.edu/ece)

The Department of Electrical and Computer Engineering offers BS and MS degrees in electrical engineering and a BS degree in computer engineering. Each of these degrees will prepare students for a wide range of careers in industry and government while also preparing them for further study in engineering, business, medicine, or law.



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## *Department of Chemical Engineering*

[www.rose-hulman.edu/che](http://www.rose-hulman.edu/che)

The Department of Chemical Engineering is the third largest department at Rose-Hulman with approximate 250 students annually. Rose-Hulman awarded the nation's first chemical engineering degree in 1889.

The Unit Operations Laboratory at Rose-Hulman has a long history of being an integral part of the undergraduate chemical engineering program. This is in keeping with the institute's conviction that students learn best by doing. The department is located in Olin Hall, which was constructed in 1984 with funds donated by the Olin Foundation. The faculty designed the new facilities around the Unit Operations Laboratory.

## *Department of Chemistry*

[www.rose-hulman.edu/chem](http://www.rose-hulman.edu/chem)

The Department of Chemistry offers an excellent program for undergraduate science and engineering students.

Rose-Hulman offers the essential introductory classes that every chemistry student needs, including general chemistry, organic chemistry, analytical chemistry, physical chemistry, biochemistry and inorganic chemistry. Because Rose-Hulman attracts excellent students, these classes are considerably more demanding than comparable classes offered at most other colleges.

Rose-Hulman also offers outstanding research opportunities for undergraduate students, in some cases beginning during the freshman year. Recent examples include: study of organic material in Antarctic lake water; the use of microfluidics for trace detection of biomolecules; a computational study of the properties of carbon nanotubes; possible metabolic roles of glucose bisphosphate.

The Rose-Hulman chemistry department has 12 faculty members supervising approximately 30 chemistry majors and they put a very high premium on individual instruction. All classes and labs are taught by full-time professors.

Few undergraduate institutions have as large and diverse a chemistry equipment list as Rose-Hulman. All of the equipment is intended for hands-on student use, either in class or as part of a research project, and as soon as possible in the student's college career. Our students (once trained) have keys to labs and permission to use the equipment.

The Rose-Hulman chemistry department has excellent and ambitious students. The department is active in Alpha Chi Sigma (the chemistry professional fraternity) and also has a student affiliate chapter of the American Chemical Society.

## *Applied Biology & Biomedical Engineering*

[www.rose-hulman.edu/abbe](http://www.rose-hulman.edu/abbe)

The applied biology program will produce biologists with the chemistry, mathematics, and physics background needed to solve biotechnological problems in the coming decades. The biomedical engineering program will produce engineers with the medical and biological knowledge needed to solve many of the health care problems that face our society. Both programs will prepare graduates for careers in the biotechnology and health-related industries, as well as in government and industrial research laboratories.

## *Department of Computer Science & Software Engineering*

[www.cs.rose-hulman.edu](http://www.cs.rose-hulman.edu)

The Rose-Hulman Department of Computer Science and Software Engineering provides students with an education in the growing field of computers. The department has grown to keep up with the increasing demands of industry by creating a new undergraduate degree in software engineering in 2003. The department moved into new facilities in Moench Hall in 2004. The department currently consists of 11 professors, and approximately 200 students.

# Colleges and Universities

## University of Notre Dame

[www.nd.edu](http://www.nd.edu)

The University of Notre Dame, founded in 1842 by a priest of the Congregation of Holy Cross, is an independent, national Catholic university located at Notre Dame, Indiana, adjacent to the city of South Bend and approximately 90 miles east of Chicago.

Admission to the University is highly competitive, with five applicants for each freshman class position. Sixty-nine percent of incoming freshmen were in the top 5 percent of their high school graduating classes.

The University's minority student population has nearly tripled in the past 17 years to more than 20 percent, and women, first admitted to undergraduate studies at Notre Dame in 1972, now account for 47 percent of undergraduate and overall enrollment.

The University is organized into four undergraduate colleges – Arts and Letters, Science, Engineering, and the Mendoza College of Business – the School of Architecture, the Law School, the Graduate School, 10 major research institutes, more than 40 centers and special programs, and the University Library system. Fall 2005 enrollment for undergraduate and graduate studies was 11,417 students.

One indicator of the quality of Notre Dame's undergraduate programs is the success of its students in postbaccalaureate studies. The medical school acceptance rate of the University's preprofessional studies (premed) graduates is 75 percent, almost twice the national average, and Notre Dame ranks first among Catholic universities in the number of doctorates earned by its undergraduate alumni – a record compiled over some 80 years.

The Graduate School, established in 1918, encompasses 43 master's and 22 doctoral degree programs in and among 28 University departments and institutes.

The source of the University's academic strength is its faculty, which since 1988 has seen the addition of some 500 members and the establishment of more than 150 new endowed professorships. Notre Dame faculty members have won 29 fellowships from the National Endowment for the Humanities since 2000, more than for any other university in the nation.

At Notre Dame, education always has been linked to values, among them living in community and volunteering in community service. Residence hall life, shared by four of five undergraduates, is both the hallmark of the Notre Dame experience and the wellspring of the University's rich tradition.

A younger tradition, the University's Center for Social Concerns, serves as a catalyst for student volunteerism. About 80 percent of Notre Dame students engage in some form of voluntary community service during their years at the University, and at least 10 percent devote a year or more after graduation to serving the less fortunate in the U.S. and around the world.

With 1,250 acres containing two lakes and 137 buildings with a total property replacement value of \$2.2 billion, Notre Dame is well known for the quality of its physical plant and the beauty of its campus. The Basilica of the Sacred Heart, the 14-story Hesburgh Library with its 132-foot-high mural depicting Christ the Teacher, and the University's newly renovated 128-year-old Main Building with its famed Golden Dome are among the most widely known university landmarks in the world.

- *Notre Dame is rated among the nation's top 25 institutions of higher learning in surveys conducted by U.S. News and World Report, Princeton Review, Time, Kiplinger's, Kaplan/Newsweek and others.*
- *The Wall Street Journal and Newsweek have cited Notre Dame as one of the "New Ivies" in American higher education, along with, among others, Duke, Northwestern, Johns Hopkins and Washington University.*
- *An influential book from Johns Hopkins University Press ranks Notre Dame sixth among 11 rising private research universities.*
- *Among major universities, Notre Dame ranks sixth in the percentage of students who have studied abroad.*
- *Notre Dame's Biological Sciences Department is an internationally recognized center for research in mosquito biology, and its Center for Global Health and Infectious Diseases houses the Aedes Reference Centre.*

# Colleges and Universities

## College of Science

[www.science.nd.edu](http://www.science.nd.edu)

The University of Notre Dame awarded its first bachelor of science degree in 1865. Today, the College of Science offers undergraduate programs in five host departments and within the interdisciplinary collegiate sequence.

**Biological Sciences:** Supporting study in the diverse and currently expanding fields of life sciences ranging from molecular genetic approaches in cancer biology and infectious disease control to population studies and environmental issues.

**Chemistry and Biochemistry:** Graduate and undergraduate degrees are offered in both Chemistry and Biochemistry. Thirty-one faculty members perform research encompassing all traditional sub-disciplines of chemistry and biochemistry while offering students opportunities for research in emerging interdisciplinary areas.

**Mathematics:** Programs prepare students for graduate studies and professional work in the diverse fields relying on advanced mathematics. Faculty research areas range from algebraic geometry to applied mathematics.

**Physics:** A broad spectrum of research opportunities and programs of study in fields ranging from nuclear to astrophysics, allowing research initiatives in both theoretical advancements and the development of important technological materials.

**Preprofessional Studies:** Formally established in 1960 to sustain excellence in the undergraduate curriculum preparing undergraduates for careers in medicine and related fields.

## Mendoza College of Business

[www.nd.edu/~cba](http://www.nd.edu/~cba)

Notre Dame's Mendoza College of Business prepares men and women for careers in business and meaningful, productive lives in service to others. It is home to more than 2,300 students engaged in undergraduate, graduate and executive studies. Dean Carolyn Woo leads a renowned faculty of teachers and scholars.

The Mendoza College offers undergraduate degrees in Accountancy, Finance, Management, Management Information Systems (MIS) and Marketing.

Graduate degree programs include: Master's in Business Administration (MBA), Master of Science in Accountancy, and Master of Nonprofit Administration (MNA). The Mendoza College offers an Executive MBA in Chicago and on the Notre Dame campus, as well as at four distance learning classrooms in the Midwest. Additional non-degree and custom executive education courses also are offered.

- *In its inaugural survey of undergraduate business programs, BusinessWeek magazine ranked Notre Dame No. 3 in the nation.*
- *Mendoza's Executive MBA Program is rated 20<sup>th</sup> by both BusinessWeek and Financial Times.*
- *The Aspen Institute rated the MBA Program fifth worldwide for its commitment to issues related to social and environmental stewardship.*
- *The MBA Program is ranked 31<sup>st</sup> overall by U.S. News & World Report.*

# *Venture Capital Resources*

Venture capital is a driving engine behind the development and expansion of both large and small companies in Indiana.

The State's Venture Capital Investment tax credit – one of the highest in the nation – improves capital access for fast-growing Indiana companies by providing tax credits to investors. The Indiana 21<sup>st</sup> Century Research & Technology Fund and numerous private venture capital funds supply promising entrepreneurs and innovative start-up companies with the necessary resources to put their ideas into motion.

The Corporation for Enterprise Development ranked Indiana fourth highest among states in venture capital percentage gained from 1999 to 2004. During the same timeframe, only 13 other states had a positive gain in venture capital investments. The trend has continued since: Indiana venture capital investment rose 40 percent from 2004 to 2005, according to a PricewaterhouseCoopers MoneyTree Survey.

In short, Indiana offers a broader base of private venture capital than ever before to help nurture growing companies.

Three notable examples of Indiana venture capital funds are the 21<sup>st</sup> Century Research and Technology Fund, the Indiana Future Fund, and the Indiana Seed Fund.

The goal of the 21<sup>st</sup> Century Fund is to enhance commercial development of new technologies and encourage creation of partnerships between universities and businesses. In 2006, the 21<sup>st</sup> Century Fund made 30 awards, totaling more than \$33.5 million, to innovative projects with significant commercial potential for Indiana.

The Indiana Future Fund, formed through the BioCrossroads life sciences initiative, is a \$73 million fund-of-funds that has invested in local and national venture capital firms.

Launched in 2005, the Indiana Seed Fund is managed by BioCrossroads, with funding coming from BioCrossroads, the Indiana Finance Authority and the Indiana Health and Educational Facility Financing Authority. The Indiana Seed Fund provides working capital to promising Indiana life sciences companies at the preliminary stages of operation.

## **1st Source Capital Corporation**

1st Source Capital Corporation is a Small Business Investment Company which provides equity financing to companies. 1st Source looks for companies with experienced, visionary management teams and a proven track record, primarily in the manufacturing, sales and distribution sectors. 1st Source Capital Corporation focuses its resources on companies in Indiana and neighboring Midwestern states.

1st Source Capital Corporation  
P.O. Box 1602  
South Bend, IN 46634  
Ph: (574) 235.2000  
[www.1stsource.com](http://www.1stsource.com)

## **21<sup>st</sup> Century Research And Technology Fund**

Created by the Indiana General Assembly in 1999 and brought under the leadership of the Indiana Economic Development Corporation in 2004, the goal of the 21<sup>st</sup> Century Research And Technology Fund is to enhance commercial development of new technologies and encourage creation of partnerships between universities and businesses.

These partnerships build on the innovation process of converting research ideas into products, which in turn creates jobs for Indiana communities. Indiana is consistently building on existing and emerging strengths to create new paths to a prosperous future. Potential 21<sup>st</sup> Century Fund projects are reviewed by peer panels of science and technology researchers, as well as economic experts from across the country.

The 21<sup>st</sup> Century Fund seeks technology-based companies conducting business in Indiana. To qualify for a grant, each company must propose a technology or business idea that demonstrates innovation and promise.

# Venture Capital Resources

The Fund makes awards in two broad categories: Science and Technology Commercialization and Centers of Excellence. In addition, the Fund provides cost-share on behalf of Federal proposals submitted by Indiana-based entities and emphasizes the creation of academic-sector: commercial-sector partnerships in making awards.

21<sup>st</sup> Century Research and Technology Fund

One North Capitol

Suite 900

Indianapolis, IN 46204

Ph: (317) 234.1687

[www.21fund.org](http://www.21fund.org)

## **Arboretum Ventures**

Arboretum Ventures is an early-stage venture capital firm that invests in private healthcare and life sciences companies. The firm's areas of focus include the medical device, diagnostic and healthcare service sectors. Located in Ann Arbor, Michigan, Arboretum invests throughout the U.S., with an emphasis on the upper Midwest.

Arboretum Ventures

334 E. Washington Street

Ann Arbor, MI 48104

Ph: (734) 998.3688

[www.arboretumvc.com](http://www.arboretumvc.com)

## **Blue Chip Venture Company**

Blue Chip Venture Company is an early and expansion stage venture capital firm with more than \$600 million of capital under management and has invested in more than 100 companies throughout the United States and Canada. Areas of focus include: Information technology, healthcare, marketing and media services, and technology infrastructure. In 2005, Blue Chip opened the firm's Indiana office with the announcement that Blue Chip had joined forces with Indiana based Gazelle TechVentures.

Blue Chip Venture Company

11611 N. Meridian Street

Carmel, IN 46032

Ph: (513) 723.2300

[www.bcvc.com](http://www.bcvc.com)

## **Cardinal Ventures, LLC**

Cardinal Ventures, LLC, is a privately owned partnership that seeks to acquire lower and middle-market businesses located in the central portion of the United States. Cardinal's goal is to buy, build and operate a small number of companies for long-term value creation. While they are not limited to the following, Cardinal provides significant value to the following transaction types:

- *Management buyouts*
- *Recapitalizations*
- *Family legacy situations*
- *Divestitures and spin-offs of divisions, subsidiaries, or product lines*

Cardinal Ventures, LLC

8910 Purdue Road

Suite 690

Indianapolis, IN 46268

Ph: (317) 228.5070

[www.cardvent.com](http://www.cardvent.com)

# Venture Capital Resources

## **Centerfield Capital Partners, LP**

Centerfield Capital Partners, LP, provides growth and business expansion capital to profitable privately held companies, with revenues between \$10 million and \$50 million, in the central region of the United States. Centerfield provides financing in the form of both subordinated debt and equity. Typically, Centerfield's capital is used to finance acquisitions, changes in company ownership, or a company's organic growth. Centerfield is principally interested in backing experienced management teams. The Partnership invests in a range of industries including:

- *Healthcare products and services*
- *Information technologies and telecommunications*
- *Business services and outsourcing*
- *Manufacturing and value-added distribution*

Centerfield Capital Partners, LP  
3030 Market Tower  
10 W. Market Street  
Indianapolis, IN 46204  
Ph: (317) 237.2323  
[www.centerfieldcapital.com](http://www.centerfieldcapital.com)

## **CID Capital**

CID Capital is actively managing seed, venture and lower middle market buyout capital funds, which together total more than \$500 million. Through a variety of different forms of capital, CID Capital has financed the growth plans of emerging technology companies, funded management buyouts, supported acquisition strategies and helped position companies for their initial public offerings. Industries of interest include information technology, life sciences, business services and manufacturing.

CID Capital  
One American Square  
Suite 2850  
Indianapolis, IN 46282  
Ph: (317) 269.2350  
[www.cidcap.com](http://www.cidcap.com)

## **COMMAND Equity Group, LLC**

COMMAND Equity Group, LLC, is an Indiana-based private venture capital management company with an emerging national investment network that focuses on making investments in start-up and early-stage technology companies. COMMAND helps to build companies by providing the capital, expertise and experience needed for faster development and higher profitability.

COMMAND Equity Group, LLC  
1213 S. High Street  
Bloomington, IN 47401  
Ph: (812) 339.3690  
[www.commandequity.com](http://www.commandequity.com)

# *Venture Capital Resources*

## **Dow Venture Capital**

Dow Venture Capital is the investment arm of the Dow Chemical Company and provides capital and other development resources to start-up companies that meet Dow investment objectives. Dow Venture Capital is active in sustaining these companies throughout their early critical years, from seed to later stage investment. Dow Venture Capital has committed more than \$300 million to businesses involved in life sciences and biotechnology, communications and information technology, electronics, and material science.

Dow Venture Capital  
The Dow Chemical Company  
2030 Dow Center  
Midland, MI 48674  
Ph: (989) 636.1000  
[www.dow.com/venture](http://www.dow.com/venture)

## **EDF Ventures III Sidecar, LP**

EDF Ventures III Sidecar, LP, makes equity investments in early-stage healthcare and information technology companies located in the U.S.

As to healthcare investments, the fund invests heavily in medical devices and selectively in pharmaceuticals and diagnostics. As to information technology investments, the fund invests in software and semiconductor solutions for mobility, security, data analytics, and IP-based communications. The fund has a specific focus on markets, such as Indiana, that have a history and culture of innovation but are underserved by venture capital.

EDF Ventures III Sidecar, LP  
425 N. Main Street  
Ann Arbor, MI 48104-1147  
Ph: (734) 663.3213  
[www.rhventures.org](http://www.rhventures.org)  
[www.edfvc.com](http://www.edfvc.com)

## **Gazelle Tech Ventures**

Gazelle TechVentures was created when a number of senior Indiana business leaders assembled to address the funding gap as a business opportunity. This group set out to create an aggressive and well-capitalized venture capital company based on the best national models of success. As members of the General Partner's Executive Committee, these business leaders have committed their time and their capital to the objective of making Gazelle "the hub of venture capital activity in Indiana and one of the most respected, leading funds in the Midwest."

Gazelle Tech Ventures  
11611 N. Meridian Street  
Carmel, IN 46032  
Ph: (317) 275.6800  
[www.gazellevc.com](http://www.gazellevc.com)

# *Venture Capital Resources*

## **Hammond, Kennedy, Whitney & Co., Inc.**

Hammond, Kennedy, Whitney & Co., Inc., is a private capital firm which was founded in 1903 and currently has offices in New York, Indianapolis, Chicago and Shanghai. The firm has led 25 platform management buy-out transactions and 37 add-on transactions since 1982. Types of transactions the firm is involved in include industry consolidations, corporate divestitures, generational changes in ownership, growth equity, management buy-outs and recapitalizations of private and public companies, or divisions of larger companies headquartered within North America.

Hammond, Kennedy, Whitney & Company Inc.  
8888 Keystone Crossing  
Suite 600  
Indianapolis, IN 46240  
Ph: (317) 574.6900  
[www.hkwinc.com](http://www.hkwinc.com)

## **Heron Capital, LLC**

Heron Capital, LLC, is a venture capital fund headquartered in Indianapolis, Indiana, and is dedicated to investing in companies focused on the life sciences, including medical devices, biotechnology, diagnostics and agricultural technology. The firm is advised by a world-renowned network of scientists and physicians, as well as entrepreneurs and leaders of national and multinational corporations. The principals at Heron Capital enjoy developing relationships with entrepreneurs and young companies, working together to build value.

Heron Capital, LLC  
One Indiana Square  
Suite 2250  
Indianapolis, IN 46204  
Phone: (317) 686.1950  
[www.heroncap.com](http://www.heroncap.com)

## **Indiana Economic Development Corporation**

The Indiana Economic Development Corporation (IEDC) is the state of Indiana's lead economic development agency. The IEDC was officially established in February 2005 to replace the former Department of Commerce. The IEDC is organized as a public/private partnership, governed by a 12-member board of directors. The IEDC Board is chaired by Governor Mitchell E. Daniels, Jr., and reflects the geographic and economic diversity of Indiana. The IEDC's mission is to grow and retain businesses in Indiana and to attract new businesses to the state.

Indiana Economic Development Corporation  
One North Capitol  
Suite 700  
Indianapolis, IN 46204  
Ph: (317) 232.8800  
[www.iedc.in.gov](http://www.iedc.in.gov)



# Venture Capital Resources

## Indiana Future Fund

The Indiana Future Fund is a \$73 million fund-of-funds that has invested in regional and national venture capital funds, encouraging direct investment in Indiana life sciences opportunities. The Indiana Future Fund seeks to foster the creation and growth of life sciences companies in Indiana, encourage the growth of a vibrant Indiana-based venture capital community and facilitate public and private partnerships within the state.

Indiana Future Fund  
c/o CSFB Customized Fund Investment Group  
11 Madison Avenue  
New York, NY 10010-3629  
Ph: (212) 325.2000  
[www.indianafuturefund.com](http://www.indianafuturefund.com)

## Indiana Seed Fund

The Indiana Seed Fund is a \$6 million seed-stage venture fund. It was formed to help narrow the gap between the discovery of an idea and actual venture capital funding. The fund is specifically focused on life sciences, which encompasses, but is not limited to, the fields of biotechnology, pharmaceuticals, nutraceuticals, agribiotech and biomedical diagnostics and devices.

Indiana Seed Fund  
300 N. Meridian Street  
Suite 950  
Indianapolis, IN 46204  
Ph: (317) 238.2450  
[www.biocrossroads.com/biolnitiatives/indianaSeedFund.aspx](http://www.biocrossroads.com/biolnitiatives/indianaSeedFund.aspx)

## IrishAngels Network

The IrishAngels network comprises members of the Notre Dame family who are experienced in entrepreneurial endeavors and committed to supporting the educational mission of the Gigot Center for Entrepreneurial Studies, Mendoza College of Business and University of Notre Dame. Entrepreneurs who are members of Notre Dame's student, alumni, faculty or staff communities are invited to make contact with IrishAngels network members through a variety of Gigot Center programs, including the annual Notre Dame Business Plan Competitions and the network's posting process.

IrishAngels Network  
Gigot Center for Entrepreneurial Studies  
University of Notre Dame  
Notre Dame, IN 46556  
Ph: (574) 631.3042  
[www.irishangels.com](http://www.irishangels.com)

## Lilly Ventures

Lilly Ventures is the venture capital arm of Eli Lilly and Company. Lilly Ventures is a \$175 million fund that targets investments in early to expansion stage companies in three areas of focus:

- **Biotechnology:** *targeting investments in biotechnology companies that leverage proprietary drug discovery or development technologies to build a robust pipeline*

# Venture Capital Resources

- **Medical Technology:** *targeting investments in companies focusing on the convergence of pharmaceuticals, devices or diagnostics*
- **Healthcare IT:** *targeting investments in start-up companies with innovative network technologies that promise to have a transformational impact on the current pharmaceutical business model*

Lilly Ventures' investment model is based on working with superior management teams to help them realize the financial potential of their ideas. Accordingly, the fund provides both financial and intellectual resources to accelerate the management teams' path to success.

Lilly Ventures  
DC 1089  
Lilly Corporate Center  
Indianapolis, IN 46285  
Ph: (317) 651.3050  
[www.lillyventures.com](http://www.lillyventures.com)

## **MidPoint Food & Ag Fund, LP**

The MidPoint Food & Ag Fund, LP, invests in promising venture stage companies that bring valuable innovations to growing segments of the food and agricultural industries. Headquartered in Indianapolis, Indiana MidPoint operates in the heart of the U.S. Midwest, which represents the greatest concentration of food and agricultural research organizations on the planet. MidPoint's management team brings more than 50 years of experience in venture capital investing and food and agriculture.

MidPoint Food & Ag Fund, LP  
5542 S. Salem Drive  
Suite 150  
Indianapolis, IN 46033  
Ph: (317) 626.9851  
[www.midpointvc.com](http://www.midpointvc.com)

## **Pappas Ventures**

Pappas Ventures invests in early-stage life sciences companies throughout the United States. Their primary interest is in the biotechnology and pharmaceutical sector. This includes companies developing platform technologies arising from the fields of genomics, proteomics and computational chemistry that accelerates and/or reduces the cost of the drug discovery process. Pappas Ventures also has a substantial interest in medical devices, drug delivery and information technology-oriented life sciences technologies.

Pappas Ventures  
P.O. Box 110287  
Research Triangle Park, NC 27709  
Ph: (919) 998.3300  
[www.pappasventures.com](http://www.pappasventures.com)

## **Pearl Street Venture Funds**

Pearl Street Venture Funds is an Indiana-based, early-stage venture capital fund investing in life science companies in the biotech, medical device, pharmaceutical and agri-bio sectors. Pearl Street Venture Funds is exclusively focused on supporting and nurturing innovative entrepreneurs. Fund officers possess significant life science industry experience,

## *Venture Capital Resources*

venture capital experience and success in advising early stage companies on growth and commercialization strategies, successful exits and syndicating venture deals. The company's goal is to help people pursue their entrepreneurial dreams, while creating an impressive return for investors.

Pearl Street Venture Funds  
20 N. Meridian Street  
Indianapolis, IN 46204  
Ph: (317) 684.3719  
[www.psvf.com](http://www.psvf.com)

### **Periculum Capital Company, LLC**

Periculum Capital Company, LLC, is a leading Midwestern investment banking firm, serving the corporate finance needs of growth and other middle market companies. The company was founded in 1998 with the vision of bringing high levels of financial advisory and transaction skills to companies with enterprise values of up to \$150 million.

Periculum was established as an investment banking firm in order to bring the highest level of quality, integrity, and ethics to its clients' corporate finance needs. The firm has been successfully involved in the creation, financing, and selling of a number of health care enterprises, and the principals have been deeply committed to the life sciences industry for the last 20 years. Periculum is a registered broker-dealer with the National Association of Securities Dealers through its operating subsidiary, Periculum Advisors.

Periculum Capital Company, LLC  
Chase Tower  
111 Monument Circle  
Suite 1022  
Indianapolis, IN 46204-5176  
Ph: (317) 636.1800  
[www.periculumcapital.com](http://www.periculumcapital.com)

### **Public Employees' Retirement Fund**

The Indiana Public Employees' Retirement Fund (PERF) is a \$16.1 billion retirement fund headquartered in Indianapolis that serves the needs of more than 220,000 public employees and retirees in Indiana. The 85th largest public pension plan in the U.S., PERF works with more than 1,100 public employers including the state of Indiana, public universities, school corporations and municipalities to provide secure, long-term benefits for their employees.

In June 2006, PERF announced the formation of the Indiana Investment Fund I, which focuses investment resources on quality Indiana businesses. The \$105 million Indiana Investment Fund I more than doubled the amount of investment capital specifically targeted at Indiana ventures.

The fund invests in firms doing business in Indiana, companies looking to expand or move operations to Indiana, or firms that invest in Indiana. Every investment undergoes rigorous review and meets PERF's traditionally high rate of return expectations.

Indiana Investment Fund I also is focused on one of the initiatives of the state's new strategic plan of increased funding for entrepreneurs and stressing the need to speed the rate at which new companies form and grow.

Public Employees' Retirement Fund  
143 W. Market Street  
Indianapolis, IN, 46204  
Ph: (317) 233.4162  
[www.in.gov/perf](http://www.in.gov/perf)

# *Venture Capital Resources*

## **Spring Mill Venture Partners, LLC**

Spring Mill Venture Partners, LLC, is an early stage venture capital firm focused on investing in high-growth information technology and life sciences companies located in Indiana and the surrounding Midwest region. The firm focuses on providing the strategic and tactical assistance that early stage companies need to grow and prosper.

Spring Mill Venture Partners, LLC  
11611 N. Meridian Street  
Suite 310  
Carmel, IN 46032  
Ph: (317) 713.7550  
[www.springmillvp.com](http://www.springmillvp.com)

## **Triathlon Medical Ventures**

Triathlon Medical Ventures is a Midwest-based venture capital fund that targets investments in early-stage biomedical technology companies located in the Midwest. The Fund also invests in mid-to-late-stage biomedical technology companies based throughout the U.S. The fund's specific focus is on high growth sectors within biomedical technology such as medical devices, diagnostics and biopharmaceuticals and emerging fields such as genomics, proteomics, regenerative medicine and drug discovery.

Triathlon Medical Ventures has offices and partners in Indianapolis, Cincinnati, Ohio, Louisville, Ky., and St. Louis, Mo. The partners are industry veterans with extensive experience as both operational managers and venture capitalists

Triathlon Medical Ventures  
20 N. Meridian Street  
Suite 810  
Indianapolis, IN 46204  
Ph: (317) 833.0545  
[www.tmvpc.com](http://www.tmvpc.com)

## **Venture Club of Indiana**

The Venture Club of Indiana's mission is to be a catalyst for the creation and growth of entrepreneurial businesses by providing a unique environment in which sources of capital, entrepreneurs and business professionals interact, connect, share information, collaborate and create business opportunities.

Venture Club of Indiana  
135 N. Pennsylvania  
Indianapolis, IN 46204  
Ph: (317) 684.5011  
[www.ventureclub.org](http://www.ventureclub.org)

## *Emerging Life Sciences Companies*

For more than a century, Indiana has been a center of innovation in the life sciences, pharmaceutical, and medical device industry. New Indiana-based start-up, emerging and growing new life sciences companies will help ensure that Indiana remains a center of life sciences innovation and development for the next 100 years. Some of these promising companies are listed here.

### **Akina, Inc.**

Established in 2001, Akina, Inc., helps the medicine go down by designing a variety of drug-delivery products.

The company's inexpensive, simple and reliable method for making fast-melting tablets, called Frosta, makes swallowing pills much easier – especially for the elderly and children, as well as people who don't have an available drink.

Akina's Stentrix technology is used to coat stents with drugs that can inhibit the re-narrowing of clogged coronary arteries that have been opened mechanically. Without such localized drug delivery, the life-saving benefits of an angioplasty could last as little as six months.

The company is also developing precision control of drug delivery. Akina's Superporous Aquagel allows for 12-hour or 24-hour delivery by oral administration. The product's expansive quality also makes it useful as a diet control aid by occupying stomach space normally available for food.

Akina, Inc.  
1291 Cumberland Avenue  
West Lafayette, IN 47906  
Ph: (765) 464.0930  
[www.akinainc.com](http://www.akinainc.com)

### **Anaclim, LLC**

Anaclim, LLC, offers a high-quality, professional approach to clinical trial implementation while enrolling representative numbers of minority patients into clinical trials.

In the United States, ethnic minorities constitute more than a third of the general population and will account for 50 percent of the nation's population in 2050. Yet these groups continue to be chronically under-represented in clinical research.

Every year 15 to 20 new drugs are approved by the Food and Drug Administration (FDA) for use in the general population in the United States. However, the clinical trial information submitted by sponsors to the FDA for the approval of these drugs has a limited amount of data on the safety and efficacy of these new treatments on patients who are members of ethnic minority groups.

Anaclim is the best choice and the best solution for large and small pharmaceutical companies developing new drugs, for biotechnology organizations developing new treatments, for academic institutions conducting different types of research in large groups of patients and for other CROs that, while focusing on the implementation of large and complex clinical trials, do not have the time or the access to minority populations.

Anaclim, LLC  
6325 Digital Way  
Suite 401  
Indianapolis, IN 46278  
Ph: (317) 275.9100  
[www.anaclim.com](http://www.anaclim.com)

# *Emerging Life Sciences Companies*

## **Andara Life Sciences, Inc.**

Andara Life Sciences, Inc. is a wholly-owned subsidiary of Cyberkinetics Neurotechnology Systems, Inc. Cyberkinetics is developing a pipeline of neurotechnology products based upon the Andara nerve growth stimulator technology. The initial basic research, on which the Andara product pipeline is based, was performed at the Center for Paralysis Research at Purdue University. Products based on the Andara technology are designed to restore sensation and motor function by repairing and regenerating neural tissue that has been damaged by a wide range of nervous system injuries and conditions, including spinal cord injury and peripheral nerve injury.

Cyberkinetics Neurotechnology Systems, Inc.  
100 Foxborough Boulevard  
Suite 240  
Foxborough, MA 02035  
Ph: (508) 549.9981  
[www.cyberkinetics.com](http://www.cyberkinetics.com)

## **BioConvergence, LLC**

BioConvergence, LLC, is an experienced contract service provider offering cGLP parenteral product development, cGMP materials management including cold chain storage, and consulting services to the pharmaceutical industry.

BioConvergence's e-transparency solution, which is the first of its kind, provides clients real-time secure access to their data found in the company research scientists' laboratory notebooks, ERP material transactions and SOPs. Located in Bloomington, Indiana, BioConvergence is a women-owned business with more than 150 years of experience in pharmaceuticals and is dedicated to providing best-in-class outsourcing services.

The firm's scientific expertise, substantial development experience along with its quality-by-design strategy contribute to the development of safe, effective and stable products meeting regulatory requirements.

BioConvergence LLC  
4320 W. Zenith Drive  
Bloomington, IN 47404  
Ph: (812) 961.1700  
[www.bioc.us](http://www.bioc.us)

## **BioStorage Technologies, Inc.**

BioStorage Technologies, Inc., provides world-class biorepository services through the expert storage, inventory management and logistics of samples and other biomaterials for the life science industry.

At its state-of-the-art facility, the company is able to store a wide range of temperature-sensitive biological materials including clinical trial samples, donor tissues, cord blood, serum, plasma and manufactured pharmaceutical ingredients at ambient to -190°C to guarantee integrity.

The firm's proprietary web-based real time information management system provides industry-leading sample tracking, reports and audit trails, therefore allowing clients to view details of each sample 24 hours a day. This system, as well as the company's worldwide cold chain logistics and team of experts, help it ensure regulatory compliance and exceptional customer service.

BioStorage Technologies, Inc.  
2655 Fortune Circle W  
Suites A-B  
Indianapolis, IN 46241  
Ph: (317) 390.1866  
[www.biostoragetech.com](http://www.biostoragetech.com)

# Emerging Life Sciences Companies

## **BioVitesse, Inc.**

BioVitesse, Inc. is a privately held early stage biotechnology company that develops, manufactures and markets automated in-process quality control monitoring systems and solutions for Rapid Bacterial Detection and Identification for the industrial microbiological markets. The company's mission is to become the global market leader with an initial focus on the bio/pharmaceutical segment followed by bottled drinking water and the food safety segments.

BioVitesse has acquired and exclusively-licensed intellectual property from Purdue University to detect and identify live bacteria in less than eight hours. The company is headquartered in the San Francisco Bay area with strong presence in Indiana. The company is leveraging its partnership with Purdue University and the life science focus of the state of Indiana by locating its biochip development sensor and its disposable cartridge manufacturing in Indiana.

The company is currently funded by angel investors, the National Science Foundation, and the state of Indiana.

BioVitesse, Inc.

3000 Kent Avenue

B2-700

West Lafayette, IN 47906-1075

Ph: (765) 775-1033

[www.biovitesse.com](http://www.biovitesse.com)

4010 Moorpark Avenue

Suite 214

San Jose, CA 95117

Ph: (408) 244-6163

## **Brogan Pharmaceuticals**

Brogan Pharmaceuticals accelerates the approval of FDA regulated products for life threatening rare diseases and orphan drug products in the U.S. In addition to the organic development of drugs for rare diseases, the company offers developers of orphan drugs and radiopharmaceuticals a vertically integrated solution to bringing diagnostic and therapeutic pharmaceuticals to market in the U.S. through an array of services, including:

- *cGMP Contract Manufacturing services and capacity at a new FDA registered 9000 sq ft facility*
- *Process manufacturing optimization*
- *Regulatory submission services*
- *Analytical methods validation and assay development for inclusion in regulatory submissions and use during both preclinical and clinical development*
- *Licensing and business development services*

Brogan Pharmaceuticals

9800 Connecticut Drive

C/o Purdue Technology Center

Crown Point, IN 46307

Ph: (219) 644.3693

[www.broganpharma.com](http://www.broganpharma.com)

## **CoLucid Pharmaceuticals, Inc.**

CoLucid Pharmaceuticals, Inc. is an early stage biotechnology company focusing on pharmacological therapy for migraines, pain and other neurological disorders.

CoLucid Pharmaceuticals, Inc.

902 N. Capitol Avenue

Suite 302

Indianapolis, IN 46204

Ph: (919) 806.4304

# *Emerging Life Sciences Companies*

## **Cook Pharmica, LLC**

Cook Pharmica, LLC, is a contract biopharmaceutical manufacturing organization developing and manufacturing mammalian cell culture-based pharmaceuticals for pre-clinical through commercial use. Cook Pharmica's mission is to provide process development, flexible manufacturing and analytical services to the global biotech community; enabling company partners to bring life saving discoveries to patients. Founded in 2004, Cook Pharmica is a privately held, wholly-owned subsidiary of Cook Group Incorporated.

Cook Pharmica's current cGMP manufacturing and purification capacity is sized for clinical and small scale commercial runs. The facility's design incorporates disposable technologies, segregated production rooms, and a uni-directional flow of operators, equipment, and supplies to reduce the risk of contamination.

Cook Pharmica's manufacturing operations are highly automated and integrated. The company also provides contract development, purification, and analytical services in its laboratories for mammalian and microbial systems. Cook Pharmica offers: cell line/strain development, clone selection, cell line adaptation, media optimization, process development, analytical development, cell banking/storage, stability testing/storage, and regulatory submission support. The firm's quality control analytical and microbiology labs also offer contract services.

Located in Bloomington, Ind., Cook Pharmica provides a new level of transparency by giving clients the opportunity to monitor projects when away from the facility through secure Internet webcams positioned to give full visibility at each stage of production. With a current facility of 124,000 square feet that is expandable to 450,000 square feet, and a second independent building with an additional 450,000 square feet, Cook Pharmica is well positioned and committed to expand its production capacity and capabilities to meet the needs of its customers.

Cook Pharmica, LLC  
1300 S. Patterson Drive  
P.O. Box 970  
Bloomington, IN 47402  
Ph: (877) 312.2665  
[www.cookpharmica.com](http://www.cookpharmica.com)

## **CS-Keys, Inc.**

CS-Keys, Inc. is a new Indianapolis-based biotechnology company focused on the development and commercialization of third generation biomarkers. The company's first product will be used to facilitate the diagnosis of cancer even at its earliest stages. The technology is adaptable into standard immunohistochemistry stains and ELISA processes. These products are unique blood and tissue tests which will be used by central laboratories or hospitals. The biomarkers are also new targets for drug development against cancer.

CS-Keys, Inc.  
Indiana University Emerging Technologies Center  
351 W. 10th Street  
Suite 353  
Indianapolis, IN 46202  
Phone: (317) 274.7722  
[www.cs-keys.com](http://www.cs-keys.com)

## **EndGenitor Technologies, Inc.**

EndGenitor Technologies, Inc., founded in February 2005, is one of Indiana's first adult stem cell companies. The company's strategy is to rapidly commercialize stem cell products for sale to researchers in industry and academia; EndGenitor also expects to develop proprietary novel adult stem cell therapeutics for the treatment of cardiovascular and hematological diseases.



## *Emerging Life Sciences Companies*

EndGenitor manufactures its adult stem cell products in its laboratories in the Indiana University Emerging Technologies Center. Cells are obtained directly from donated umbilical cord blood. EndGenitor stem cell products are currently purchased by customers in the research community through the company's partnership with Dynacell Life Sciences, LLC.

EndGenitor's products are expanded, cryopreserved, banked, and HLA-typed adult stem cells. EndGenitor will not engage in any research, development, or use in manufacturing human embryonic stem cells, or use any biological products that are derived from the destruction of human embryos. Two adult stem cell product lines are being developed in parallel: Endothelial Colony-Forming Cells (ECFCs), for use as a "platform" angiogenic therapeutic for treatment of diseases of the cardiovascular system, and hematopoietic ("blood forming") stem cells (HSCs), which could be capable of reconstituting hematopoiesis after radiation therapy for treating individuals with blood cancers.

EndGenitor Technologies, Inc.  
351 W. 10th Street  
Suite 223  
Indianapolis, IN 46202-4125  
Ph: (317) 278.1523  
[www.endgenitor.com](http://www.endgenitor.com)

### **Endocyte**

Endocyte is developing a new generation of receptor-targeted therapeutics or "smart drugs" for the treatment of cancer and autoimmune diseases.

Current non-targeted drugs are usually toxic to normal healthy cells, which causes serious side effects. These side effects can be life-threatening, which leads to suboptimal dosing. Receptor-targeted therapeutics can be more effective because they can be targeted with lethal precision to high affinity receptors over-expressed by diseased cells.

Endocyte's initial focus is on a receptor for the vitamin folic acid, which is often over-expressed on cancer cells. By attaching drugs to folic acid, the vitamin acts like a "Trojan Horse" to target and deliver drugs to cancer cells, which could allow higher and more effective doses to be given with reduced side effects.

Endocyte  
3000 Kent Avenue  
Suite A1-100  
West Lafayette, IN 47906  
Ph: (765) 463.7175  
[www.endocyte.com](http://www.endocyte.com)

### **En'Urga, Inc.**

En'Urga Inc. is the industry leader in customized optical diagnostic equipment for the most challenging factory floor application.

En'Urga Inc. has 12 years of experience in optical diagnostics and research, serving many Fortune 50 companies and federal government agencies. The company's expertise in emission and absorption tomography in hostile environments enables measurement and control of varied processes in a wide array of industries.

En'Urga manufactures imaging spectrometers and optical patternators. The imaging spectrometer is used to measure temperatures, gas concentrations, emissivity, and particulate concentrations in reacting flows and film thickness, surface temperatures and surface defects in web manufacturing processes. The optical patternator is used to assure the quality of nozzles used in the spray coating of tablets and medicinal stents, fuel injectors, automotive painters, and nebulizers. The company also performs contract research, product development and testing for a wide variety of customers.

En'Urga, Inc  
1291 A Cumberland Avenue  
West Lafayette, IN 47906  
Ph: (765) 497.3269  
[www.enurga.com](http://www.enurga.com)

# *Emerging Life Sciences Companies*

## **FuturaGene, Inc.**

FuturaGene is a leader in plant genetic research and development for global agricultural and biofuel markets. Collaborating with renowned institutional partners worldwide, FuturaGene is able to take an innovative and multi-faceted approach to significantly improve agronomic traits of value in plants.

The company's diverse genomics program has resulted in the discovery of more than 40 plant genes and gene candidates, and many more in the pipeline. These genes have been shown to play pivotal roles in the plants' ability to tolerate environmental stress such as drought, salinity, heat, and cold. In addition, these genes have also shown to significantly increase biomass of biofuel feedstocks with enhanced processability characteristics. This would lead to cost reduction in producing ethanol or other biofuel from lignocellulosic biomass.

FuturaGene's technologies are at various stages of being evaluated in a variety of plants, ranging from high value crops to forestry to ornamentals and biofuel feedstock. With a strong intellectual property base, and continued addition to this foundation, FuturaGene is able to provide customized yet sustainable agriculture.

FuturaGene, Inc.  
1435 Win Hentschel Boulevard  
Suite 115  
West Lafayette, IN 47906  
Ph: (765) 497.7299  
[www.futuragene.com](http://www.futuragene.com)

## **Griffin Analytical Technologies, LLC**

Where chemical analysis was formerly a lengthy process that required bringing samples to the lab, Griffin has shifted the logistics paradigm from "sample-to-lab analysis" to "lab-to-sample analysis" with its unique fieldable mass spectrometers.

Founded in 2001, Griffin Analytical Technologies, a business unit within the Detection Division of ICx Technologies, Inc., is emerging as a leader in field analytical instrumentation by offering the only complete family of fieldable Gas Chromatograph/Mass Spectrometers (GC/MS) that are capable of multi-dimensional analysis (MS/MS). By employing an experienced and talented team of engineers and mechanical experts, Griffin successfully transforms technology realized during research and development efforts into premium class products.

The Griffin product family offers specific solutions to a broad range of chemical threats encountered by its customers. By integrating a unique analyzer technology with specialized form factors and user-appropriate software, Griffin's products can be deployed to an array of environments, from the safety of a laboratory to the most dangerous "hot zones." Griffin produces invaluable products that provide accurate information for making critical decisions regarding life, safety, and the environment.

Griffin Analytical Technologies  
3000 Kent Avenue  
West Lafayette, IN 47906  
Ph: (765) 775.1701  
[www.griffinanalytical.com](http://www.griffinanalytical.com)

## **Inproteo**

Proteomics has the potential to radically improve human understanding of disease and wellness. Inproteo is working to develop novel instrumentation and methodologies to unleash that potential to improve human health. Successfully applying analytical chemistry to design, create and optimize novel instrumentation and methodologies will generate actionable information for the discovery and development of diagnostic and therapeutic agents.

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Inproteo was established to combine the deep analytical chemistry expertise of Indiana and Purdue Universities with the commercial and therapeutic know-how of Eli Lilly and Company. Inproteo's collaborative and highly synergistic cross-institutional projects have enabled the company to produce innovative technologies that can be licensed or spun off into new companies.

Inproteo  
351 W. 10th Street  
Suite 120  
Indianapolis, IN 46202  
Ph: (317) 278.8185  
[www.inproteo.com](http://www.inproteo.com)

### **Life Plus, LLC**

Life Plus, LLC, is the gateway for many companies looking to do business in China, providing a biotech business bridge between East and West. With an office in Beijing and established alliances with two Chinese testing laboratories, Life Plus enables companies to move technology-oriented products, such as new chemicals and medical devices, through China's extensive regulatory process and then commercialize them.

The Purdue Research Park-based company assesses the market, oversees product testing at a network of laboratories to ensure compliance with the government's stringent requirements, prepares dossiers for submission to the appropriate agency, and serves as a client advocate once the regulatory package has been submitted.

Life Plus, LLC  
Purdue Technology Center  
3000 Kent Avenue  
Suite D1-110  
West Lafayette, IN 47906  
Ph: (765) 807.0778  
[www.lifeplustox.com](http://www.lifeplustox.com)

### **Muroplex Therapeutics, Inc.**

Muroplex Therapeutics, Inc. is a seed stage, development focused biotechnology company with offices in Indianapolis, and a laboratory at the Indiana University Emerging Technology Center on the IUPUI campus. The proprietary Muroplex technology, under worldwide exclusive license from Eli Lilly and Company, extends the principles of vaccination into therapeutic applications.

Muroplex Therapeutics, Inc.  
1321 Broadway Street  
Indianapolis, IN 46202

### **Ocimum BioSolutions, Inc.**

Ocimum Biosolutions, Inc., is a life sciences R&D enabling company with three focus areas, BioIT, BioMolecules, and BioResearch. Ocimum delivers end-to-end genomic products and services out of three strategic locations worldwide: Indianapolis (United States), IJsselstien (The Netherlands), Hyderabad (India).

The BioIT Division provides key, ready to use, reliable, cost-effective software solutions for the biotech/pharma industry. This division includes three 21 CFR Part 11 and GLP compliant Lab Information Management Systems (LIMS) products – Biotracker, Pharmatracker and Toxchek – and a suite of bioinformatics products, including Genchek (sequence analysis), OptGene (gene design), Genowiz (microarray data analysis) and iRNAchek (iRNA template design). The division also

## *Emerging Life Sciences Companies*

offers data mining, literature mining, algorithm development, gene identification, multiple-platform software development, database creation and manipulation, and tools for image analysis.

The BioMolecules Division produces microarrays and oligonucleotides. The Microarray Division has been recently acquired from MWG Biotech (Germany) and produces catalog OciChip arrays, Custom OciChip arrays and offers microarray hybridization services. The Oligonucleotides Division, which has been acquired from Isogen Lifescience (The Netherlands), makes standard and modified DNA, RNA oligonucleotides.

The BioResearch Division provides molecular biology services like GMO testing, nucleic acid purification, DNA extractions and gene synthesis.

Ocimum Biosolutions Inc.

Fortune Park VI

8765, Guion Road

Suite G

Indianapolis, IN 46268

Ph: (317) 228.0600

[www.ocimumbio.com](http://www.ocimumbio.com)

### **ProCure Treatment Centers, Inc.**

ProCure Treatment Centers, Inc., was created to increase the availability of proton therapy to the many cancer patients who can potentially benefit from this advanced form of radiation therapy.

In many instances, proton therapy has been shown to be an effective treatment with better control and elimination of tumors causing fewer side effects than standard x-ray therapy. While it clearly has been shown to be advantageous as an external beam treatment option, the relative lack of treatment capacity has limited the availability of the technology. With today's advancements technically and administratively, this treatment modality can be made available to leading practices and hospitals.

ProCure has developed an innovative turnkey solution for the design, construction, operation, and maintenance of proton therapy facilities. FDA-cleared and Medicare reimbursable, proton therapy is a viable and important option for leading radiation oncologists in private practices and hospital settings. ProCure uses a standardized model that provides each center with "best-in-class" diagnostic, treatment planning, facility management, and imaging integration systems and software. The company maintains centralized planning, recruitment and training policy and protocol development, reimbursement guidance, operations support and back-up facilities.

ProCure will partner with leading physician practices and hospitals to build and operate a world-class network of proton therapy facilities in the United States. To maintain high standards as the company opens new treatment centers, a team of well-respected medical and technical experts will assist in the ongoing development of a world-class training facility, now under construction in Bloomington. The ProCure Training and Development Center will provide a hands-on simulation of both gantry and fixed-beam treatment rooms, as well as all positioning, imaging, and software control aspects of treatment.

ProCure Treatment Centers, Inc.

Corporate Headquarters

115 N. College Avenue

Suite 210

Bloomington, IN 47404

Ph: (812) 323-8505

New York Office

444 Park Avenue South

Suite 1101

New York, NY 10016

Ph: (212) 584.0960

[www.procurecenters.com](http://www.procurecenters.com)

# *Emerging Life Sciences Companies*

## **Prosolia, Inc.**

Established in 2003, Prosolia, Inc. develops and markets revolutionary analytical and preparative chemistry tools that enhance and expand the use of mass spectrometry.

The company's first product line, Omni Spray Ion Sources introduced in November 2005, brings the power of DESI to the laboratory. Invented in the laboratory of Dr. Graham Cooks at Purdue University, desorption electrospray ionization (DESI) is a simple, sensitive, gentle, and versatile ionization method, that allows for the direct sampling of surfaces without any sample preparation and under ambient temperature and pressure conditions. Compatible with most commercially available mass spectrometers, Omni Spray Ion Sources has applications in biological imaging, homeland security, drug development, environmental science and industrial surface chemistry.

Prosolia, Inc.  
351 W. 10th Street  
Suite 316  
Indianapolis, IN 46202  
Ph: (317) 278.6171  
[www.prosolia.com](http://www.prosolia.com)

## **QuadraSpec**

Quadraspec is changing the face of diagnostic medicine. The company has commercialized a fully integrated bioassay and diagnostics platform using Spinning Disc Interferometry, a patented direct detection technology for high-throughput, label-free, highly sensitive and multiplexed assays for protein analysis. The technology allows for rapid quantitation of thousands of unique protein interactions with small sample volumes and very little sample preparation. With market disruptive costs to researchers and laboratories and applications from discovery through development, Quadraspec aims to become the gold standard platform for multi-marker bioassays and diagnostics.

Quadraspec, Inc.  
3000 Kent Avenue  
West Lafayette, IN 47906  
Ph: (765) 775-1026  
[www.quadraspec.com](http://www.quadraspec.com)

## **Schwartz Biomedical, LLC**

Schwartz Biomedical is a tissue engineering company that provides patent-protected technology platform solutions to orthopaedic problems that improve patient outcomes and ultimate quality of life.

Schwartz Biomedical, LLC  
3201 Stellhorn Road  
Fort Wayne, IN 46815  
Ph: (260) 407.6468  
[www.schwartzbiomedical.com](http://www.schwartzbiomedical.com)

## **Sentry Logistic Solutions, Inc.**

Sentry Logistic Solutions, Inc., is one of the few cold chain storage and third party logistics providers in the U.S. to exclusively serve the global pharmaceutical, biotechnology and healthcare industries.

Sentry's facilities, infrastructure and services are specifically designed to meet the warehousing, packaging and logistics needs of pharma and biotech firms, healthcare providers and suppliers, contract research organizations, contract

## *Emerging Life Sciences Companies*

manufacturing organizations, wholesalers, distributors and government entities. Sentry provides secure ambient, refrigerated and frozen management for finished drug products, validated packaging, active pharmaceutical ingredients, bulk drug substances, temperature-sensitive biopharmaceutical compounds, consumer healthcare products and pharmaceutical samples.

Sentry's team offers expertise in cold chain storage and logistics, quality assurance, pharmaceutical packaging and kitting development. The company also offers strategic solutions for domestic and international transportation and logistics as well as end-to-end import and export management. Sentry is privately-held and headquartered in a foreign trade zone area in Indianapolis, minutes away from the country's second-largest FedEx hub, the Indianapolis International Airport and five major interstates.

Sentry Logistic Solutions, Inc.  
4605 Decatur Boulevard  
Indianapolis, IN 46241  
Ph: (317) 856.5889  
[www.SentryLogistic.com](http://www.SentryLogistic.com)

### **Seyet, LLC**

Seyet turns data into knowledge by providing premier science visualization solutions that are accurate, clear, and comprehensive. These solutions explain complex processes and technologies to critical audiences including investors, scientists, doctors, sales representatives, patients, and juries. Solutions range from highly accurate dataset generated graphics and 3-D animation to representational images. Seyet's expertise in working with scientific data provides the capability to create visually engaging solutions that are also scientifically accurate and verified.

Seyet, LLC  
Purdue Research Park  
3000 Kent Avenue  
West Lafayette, IN 47906  
Ph: (765) 532.0225  
[www.seyet.com](http://www.seyet.com)

### **SonarMed, Inc.**

SonarMed, Inc., is a development stage company located in Indianapolis. The company's core technology is an acoustic pulse-echo technique that probes endotracheal (breathing) tubes with sound and uses the returning echoes to determine the tube's position within a body cavity.

The company will use this technology to develop and market a line of "intelligent" endotracheal tubes, called SmartTubes, which will provide clinically relevant information regarding the location and degree of obstructions within the tube and tube position within the patient. Currently, there are no medical devices or clinical methods available that can provide this level of information in an immediate, cost effective and automated fashion.

It is expected that the company's technology will set a new standard of care for artificial airway establishment and management in patients who require breathing assistance.

SonarMed, Inc.  
5513 W. 74th Street  
Indianapolis, IN 46268  
Ph: (317) 489.3161  
[www.sonarmed.com](http://www.sonarmed.com)

## *Emerging Life Sciences Companies*

### **SSCI**

SSCI, an Aptuit Company, is a comprehensive cGMP research and analytical service firm for the pharmaceutical, specialty, industrial, and fine chemical industries, focusing on the characterization and chemistry of solid materials. The company's primary focus is to help pharmaceutical industry clients to improve chemical candidate success during drug development and improve the quality of the drug products that they offer to the world. Additionally, SSCI provides professional development short courses and other educational services to its customers. The company's service offering includes: Polymorph and Salt Screening and Selection, Form Selection, Property Improvement, Crystallization of Difficult Materials, Process Control, Full Analytical Chemistry Support, Intellectual Property Consulting and Litigation Support, and related research activities.

SSCI, an Aptuit Company  
3065 Kent Avenue  
West Lafayette, IN 47906  
Ph: (765) 463.0112  
[www.ssci-inc.com](http://www.ssci-inc.com)

### **Strand Analytical Laboratories**

Co-founded by Scott C. Newman, a former two-term, elected district attorney, and Dr. Mohammad A. Tahir, an internationally recognized DNA expert, Strand Analytical Laboratories brings law and science together to improve the process of DNA collection, testing, analysis, and presentation.

Clients have peace of mind knowing legal professionals and nationally acclaimed scientists are handling their forensic and parentage DNA cases at a fully accredited, state-of-the-art lab. Scientists use the latest technology and accepted procedures to produce accurate and reliable results in formats tailored to the client's unique needs for the most persuasive legal presentations.

Strand Analytical Laboratories offers both forensic and parentage testing for court systems and government entities, law enforcement agencies and attorneys. The lab is accredited for the full range of paternity and forensic casework, as well as convicted offender database profiling (CODIS), through the American Association of Blood Banks (AABB) and FQS/ISO-17025.

Strand Analytical Laboratories  
5770 Decatur Boulevard  
Suite A  
Indianapolis, IN 46241-9561  
Ph: (317) 455.2100  
[www.strandlabs.com](http://www.strandlabs.com)

### **Sundeo Technologies, LLC**

Sundeo Technologies, LLC, was organized to design, patent and market superior new products and devices in several established markets. At Sundeo, this has resulted in several extraordinary new patent-pending products. Several product designs have already been prototyped and tested in alpha and/or beta trials that represent disproportionate value for widely-used devices. Sundeo is marketing this proprietary new functionality to selected producers of original equipment and after-market products in key markets.

Sundeo Technologies, LLC  
351 W. 10th Street  
Suite 120  
Indianapolis, IN 46202  
Ph: (317) 625.1820  
[www.sundeotech.com](http://www.sundeotech.com)

# *Emerging Life Sciences Companies*

## **The Chao Center for Industrial Pharmacy & Contract Manufacturing**

The Chao Center was initiated by a donation from Dr. Allen Chao and his wife Lee-Hwa to the School of Pharmacy and Pharmaceutical Sciences at Purdue University.

The Chao Center is a limited liability corporation whose single share holder is the Purdue Research Foundation and is located in the Purdue Research Park, Indiana's first Certified Technology Park. The Chao Center is affiliated with Purdue University and the School of Pharmacy.

Its capabilities include development and cGMP manufacturing of pharmaceuticals. The Chao Center is capable of manufacturing non-sterile products such as tablets, capsules, suspensions, syrups, and emulsions. In addition, it has both formulation and analytical pharmaceutical development capabilities. Analytical services include method development and validation, cGMP testing product and excipient testing and stability testing per ICH guidelines.

The Chao Center for Industrial Pharmacy & Contract Manufacturing

3070 Kent Avenue

West Lafayette, IN 47906-1075

Ph: (765)464.8414

[www.thechaocenter.com](http://www.thechaocenter.com)

## **Tutela Medicus, Inc.**

Tutela Medicus, Inc., is a company providing product development services to the medical device industry.

With its Latin translation being "to protect the physician," the first purpose for Tutela Medicus is to provide a medical professional the opportunity to present the "paper napkin," and in turn provide the inventor with his or her opportunity to develop and protect the idea.

Innovation in the medical device industry is driven by customer ideas and insight; however, many concepts lay dormant due to a lack of intellectual property protection. Development and protection of ideas from the medical professional not only increases the chances of finding an industry sponsor, but also will increase the royalty return.

Tutela Medicus also recognizes the excessive number of concepts that the medical device company has (or could have) in queue, but lacks the internal resources available to develop them. Additionally, many of these ideas that are brought to companies lay undeveloped or underdeveloped due to a lack of internal resources. In providing an outlet to offload certain projects, Tutela Medicus provides companies the ability to better manage their project load and ensure that products are prepared for the market in an expedited time frame.

Tutela Medicus, Inc.

7350 E. 86th Street

Suite 203

Indianapolis, IN 46256

Ph: (317) 585.8818

[www.tutelamedicus.com](http://www.tutelamedicus.com)



# *State Business News*

*Indiana Business Magazine*

[www.indianabusiness.com](http://www.indianabusiness.com)

*Indiana Economic Digest*

[www.indianaeconomicdigest.net](http://www.indianaeconomicdigest.net)

Inside Indiana Business

[www.insideindianabusiness.com](http://www.insideindianabusiness.com)

## Indiana's Business Advantages

Indiana is the ideal place to start or grow a life sciences business. The State nurtures innovation and discovery through strong collaborations between universities, businesses and the public sector. It's a state where companies from around the globe find the talent and resources they need to build success.

Indiana offers a low-cost, pro-business environment and a highly skilled, educated and capable workforce. Thanks to recent governor's initiatives and legislative successes, businesses are finding Indiana increasingly attractive for new investments. Adoption of state-of-the-art telecommunication legislation has led to major new investments in broadband and fiber optics across the state.

Indiana also is embarking on a massive infrastructure investment program as part of the country's largest ever monetization of public infrastructure, including roads, bridges and airports. The state now leads the nation with the most aggressive telecommunication laws and infrastructure investment plan.

Indiana's low-cost business environment features low utility costs, and the State's worker' compensation and unemployment insurance rates are among the lowest in the country.

Indiana is a convenient, cost-effective location for all sectors of the biomedical and life sciences industries.

<b>Business Costs</b>	<b>Indiana</b>	<b>Illinois</b>	<b>Michigan</b>	<b>Ohio</b>	<b>North Carolina</b>	<b>Massachusetts</b>	<b>New Jersey</b>	<b>New York</b>	<b>California</b>
<b>Total State Business Taxes Sum of Corporate State Income Tax, Workers' Compensation Insurance, Unemployment Insurance (2006)</b>	<b>\$169,739</b>	<b>\$267,448</b>	<b>\$256,858</b>	<b>N/A</b>	<b>\$183,993</b>	<b>\$268,336</b>	<b>\$363,906</b>	<b>\$322,233</b>	<b>\$568,714</b>
<b>Corporate State Income Tax Due Per Net Taxable In- come of \$1,000,000 (2006)</b>	<b>\$85,000</b>	\$73,000	\$71,213	\$85,000	\$69,000	\$95,000	\$90,000	\$75,000	\$88,400
<b>Average Workers' Compensation Annual Premium Based on 100 Employees (2006)</b>	<b>\$65,839</b>	\$167,048	\$161,345	N/A*	\$94,193	\$135,536	\$204,706	\$218,433	\$456,514
<b>Average Workers' Compensation Rate (2006)</b>	<b>\$1.97</b>	\$3.82	\$4.13	N/A*	\$2.79	\$2.87	\$4.39	\$4.47	\$10.55
<b>Average Unemployment Insurance Based on 100 Employees (July 2006)</b>	<b>\$18,900</b>	\$37,400	\$24,300	\$24,300	\$20,800	\$37,800	\$69,200	\$28,900	\$23,800

\* No private workers' compensation insurance; handled through state

# Indiana's Business Advantages

## Indiana's Low Workers' Compensation Costs Are no Accident.

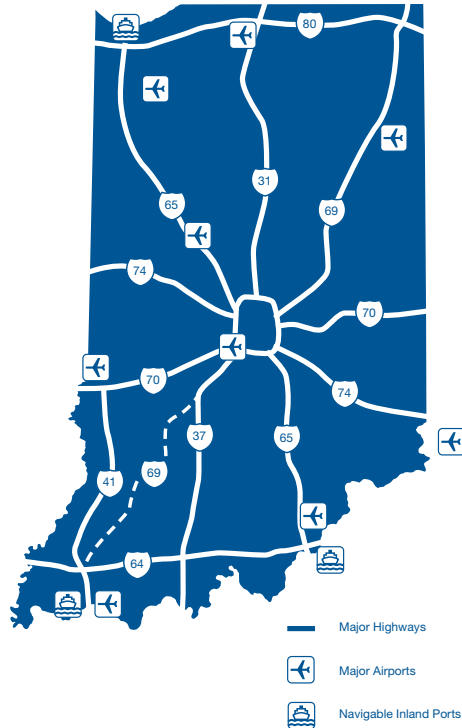
Preventing work-related accidents is the best method to reduce workers' compensation claims. Several states, including Indiana, allow non-risk-based discounts known as "schedule rating plans," which are implemented on a variety of factors including: drug-free workplace programs, on-site medical facilities, safety devices, and training and management safety organizations. While many states limit their total discount to 25 percent, Indiana regulations allow a maximum discount of up to 50 percent.

## Market Competition Means the Best Rates for Workers' Compensation

Indiana allows businesses to shop for the best workers' compensation rates among various insurance companies. For this to be financially beneficial to employers, however, there needs to be substantial competition. In Indiana, there are 280 insurance companies offering workers' compensation insurance. Not only is this one of the highest totals in the nation, but also new insurance carriers enter the Indiana market each year. This competitive market is just one of the reasons Indiana companies often enjoy better rates and service than their out-of-state competitors.

<b>Other State Business Data</b>	<b>Indiana</b>	<b>Illinois</b>	<b>Michigan</b>	<b>Ohio</b>	<b>North Carolina</b>	<b>Massachusetts</b>	<b>New Jersey</b>	<b>New York</b>	<b>California</b>
<b>Average Annual Wage</b> (2005)	\$34,080	\$39,290	\$40,040	\$36,270	\$34,460	\$45,970	\$43,860	\$44,060	\$42,510
<b>Average Price of Electricity, 2004 Industrial Sector</b> (cents/kWh)	4.13	4.65	4.92	4.89	4.88	8.48	9.03	7.04	9.52
<b>Average Annual Unemployment (2006)</b>	5.40%	5.70%	6.70%	5.90%	5.20%	4.80%	5.10%	5.00%	5.40%

# Indiana's Business Advantages



## Indiana's Transportation Infrastructure Advantage

Known as the "Crossroads of America," Indiana has extraordinary multi-modal capabilities to speed distribution channels. State transportation infrastructure highlights include:

- *Indiana is intersected by more interstate highways than any other state*
- *More than 11,000 total highway miles*
- *A rail system of more than 4,700 miles of mainline track*
- *International airports located in Indianapolis, Fort Wayne and Terre Haute*
- *More than 40 additional regional and municipal airports with runways longer than 1,219 meters*
- *Three state-of-the-art international ports, located on two major inland waterways, that are Foreign Trade Zones and major facilities for air cargo and package services*
- *The nation's second largest FedEx facility, located at Indianapolis International Airport.*

